

STATE OF CALIFORNIA
DEPARTMENT OF FISH AND GAME

FISH BULLETIN No. 105

THE MARINE FISH CATCH OF CALIFORNIA

For the Years 1955 and 1956

with

ROCKFISH REVIEW

BY THE STAFF OF THE
MARINE RESOURCES OPERATIONS



1958



Figure 1

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FOREWORD

This bulletin includes records of the pounds of fish landed in the different areas of the State and their value to the fishermen. It is prepared to meet the numerous requests for such data received throughout the year from members of the fishing industry, harbor commissions, scientists, and persons in other related fields for use in their studies and reports.

This is the seventeenth in the series of fish bulletins dealing with fish catch. The first published in 1929, contained records of the State's commercial fish catch for 1926 and 1927. Data for subsequent years have been published annually or biennially. It is desirable to present the tables in a similar manner from year to year in order to maintain continuity of records. However, due to changing conditions in fisheries problems a certain amount of flexibility in presentation and context of the tables is desirable. This year for the first time the important species of sole (flatfish) are separated in the record. Although this bulletin carries the title "Marine Fish Catch" small poundages of fresh water commercial landings are also included.

Through the continued cooperation of the Wildlife Protection Branch the accuracy and completeness of the records is insured.

January, 1958

ROCKFISH REVIEW

By J. B. PHILLIPS
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INTRODUCTION

The largest and most colorful family of fishes known to inhabit the waters of California are found in our coastal sea. Scientists have given this family of fishes the name Scorpaenidae. You and I know them best as rockfish.

There are 52 different kinds of rockfish in the ocean waters of the State. Each year these provide food and gainful employment for a large segment of our population, as well as healthful recreation for thousands of individuals.

California Department of Fish and Game marine biologists are gathering facts which will be used to improve this important fishery. These facts are necessary to maintain it at a high level for future generations of fishermen.

Tremendous strides toward attaining these objectives have already been made. For example, Fish Bulletin No. 104 was recently published. This publication standardizes scientific terminology and creates order out of a confusing abundance of scientific names. It also contains a photograph and a detailed description of each kind of California rockfish and tells how it can be accurately identified.

The next important step is to strive for improvement of rockfish catch records, a large proportion of which are classified as simply "Rockfish." A standard "grouping" system is proposed for recording future market landings throughout the State (Table 5). Considerable field work will be necessary on this project because of the frequent admixture of species in a catch, and because of the diversity of common names in use for many years at different fishing ports.

In general, the important species caught by sport fishermen in inshore waters are different from those caught by commercial fishermen operating in offshore waters. Therefore, adjustments in the proposed catch record system will no doubt be necessary, as sport catch records are improved.

Accurate catch records for each kind of rockfish, will enable biologists to detect and evaluate important fluctuations.

PAST DEVELOPMENTS IN THE CATCH

Commercial

Various kinds of rockfish were commercially important in California as early as 1875. By 1900 the catch totaled between one and two million pounds. An increased demand for food during World War I resulted in a catch of eight million pounds by 1918.

After a postwar slump, landings increased from 4 million pounds in 1922 to about 7 million pounds per year during the period 1926-1931. Following this period, the catch declined steadily to a low of $1\frac{1}{2}$ million pounds in 1942. This decline began after the stock market crash, but was too long (11 years) to be attributed entirely to its effects.

Three reasons for this drop in landings are: the meteoric expansion of the California sardine fishery during 1932-1936, the unprecedented demand for soupfin shark livers during the period 1937-1943, and the military restrictions on vessel cruises that went into effect at the start of World War II.

TABLE 1
Total Annual Rockfish Landings in the Northern, Central, and Southern
California Areas,* 1916-1956, Inclusive

Year	Pounds			
	Northern	Central	Southern	Total
1916	14,279	2,773,638	2,131,035	4,918,952
1917	28,082	4,307,400	3,438,544	7,774,026
1918	65,511	5,041,638	3,135,605	8,242,754
1919	15,075	3,508,089	1,874,945	5,398,109
1920	20,454	3,576,177	2,036,446	5,633,077
1921	30,672	2,952,000	1,778,986	4,761,658
1922	22,872	2,538,683	1,750,459	4,312,014
1923	7,473	2,743,770	2,345,379	5,096,622
1924	20,477	1,578,083	3,144,325	4,742,885
1925	66,414	1,973,220	3,448,987	5,488,621
1926	65,506	3,194,390	4,281,073	7,540,969
1927	124,346	2,713,534	3,552,724	6,390,604
1928	107,264	3,284,602	3,028,043	6,419,909
1929	257,819	2,715,208	3,063,382	6,036,409
1930	250,968	3,853,466	3,120,930	7,225,364
1931	105,950	3,605,088	3,566,658	7,277,696
1932	89,232	3,043,780	2,503,307	5,636,319
1933	31,119	2,756,025	2,000,630	4,787,774
1934	116,182	2,598,479	1,889,370	4,604,031
1935	160,321	3,036,733	1,634,120	4,831,174
1936	187,424	3,481,605	934,875	4,603,904
1937	133,417	3,142,243	1,015,554	4,291,214
1938	547,603	2,407,904	681,630	3,637,137
1939	755,440	1,718,643	859,043	3,333,126
1940	583,605	2,113,302	873,729	3,570,636
1941	456,083	1,913,120	1,036,419	3,405,622
1942	271,959	726,068	425,413	1,423,440
1943	1,375,468	887,535	499,189	2,762,192
1944	5,525,923	800,666	95,641	6,422,230
1945	11,718,824	1,362,287	204,863	13,285,974
1946	9,464,778	1,341,089	355,355	11,161,222
1947	6,356,942	1,732,780	408,862	8,498,584
1948	3,952,240	1,954,521	634,215	6,540,976
1949	3,290,741	1,868,638	908,498	6,067,877
1950	3,744,222	3,428,393	943,294	8,115,909
1951	4,573,598	5,380,488	1,037,966	10,992,052
1952	2,635,194	7,277,538	807,453	10,720,185
1953	3,091,672	8,477,957	658,601	12,228,230
1954	3,193,209	8,161,586	1,285,337	12,640,132
1955	2,967,837	5,722,645	3,991,215	12,681,697
1956	3,118,829	8,558,692	3,265,994	14,943,515

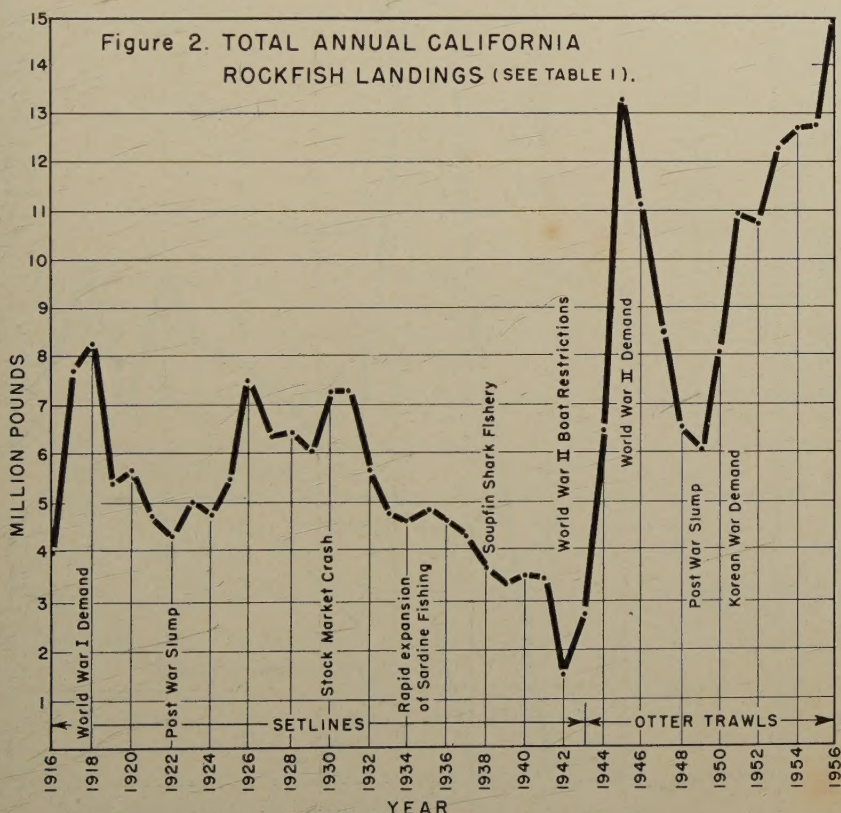
* Northern Area—California State boundary south to Sonoma County line.

Central—Sonoma County south to San Luis Obispo County line.

Southern—San Luis Obispo County south to international boundary.

The sardine catch expanded from 200,000 tons in 1932 to a high of 735,000 tons in 1936. Many setline fishermen deserted the rockfish fishery for the more profitable sardine purse seine fishery. Others began fishing for soupfin sharks during the period 1937-1943, when soupfin livers commanded extremely high prices because of their Vitamin A potency.

A need for fishery products caused military restrictions to be relaxed, however, and the rockfish catch doubled each year to a high of 13 million pounds in 1945. This increase in annual landings indicated that the stocks had not yet been overfished. When World War II ended, military orders were withdrawn and production dropped to 6 million pounds in 1949. The catch has climbed steadily since then to an all-time high of nearly 15 million pounds in 1956 (Figure 2).



Before 1941 the yearly landings of rockfish were larger for California than for Oregon, Washington, and Alaska combined. Before 1940, landings in the Pacific Northwest were less than 1 million pounds, but increased demands during World War II skyrocketed the catch to 43 million pounds in 1945—an all-time high. Landings declined during 1946 and have fluctuated between 12 and 20 million pounds per year since 1947 (Figure 3). The Alaska rockfish resources are relatively unexploited at present.

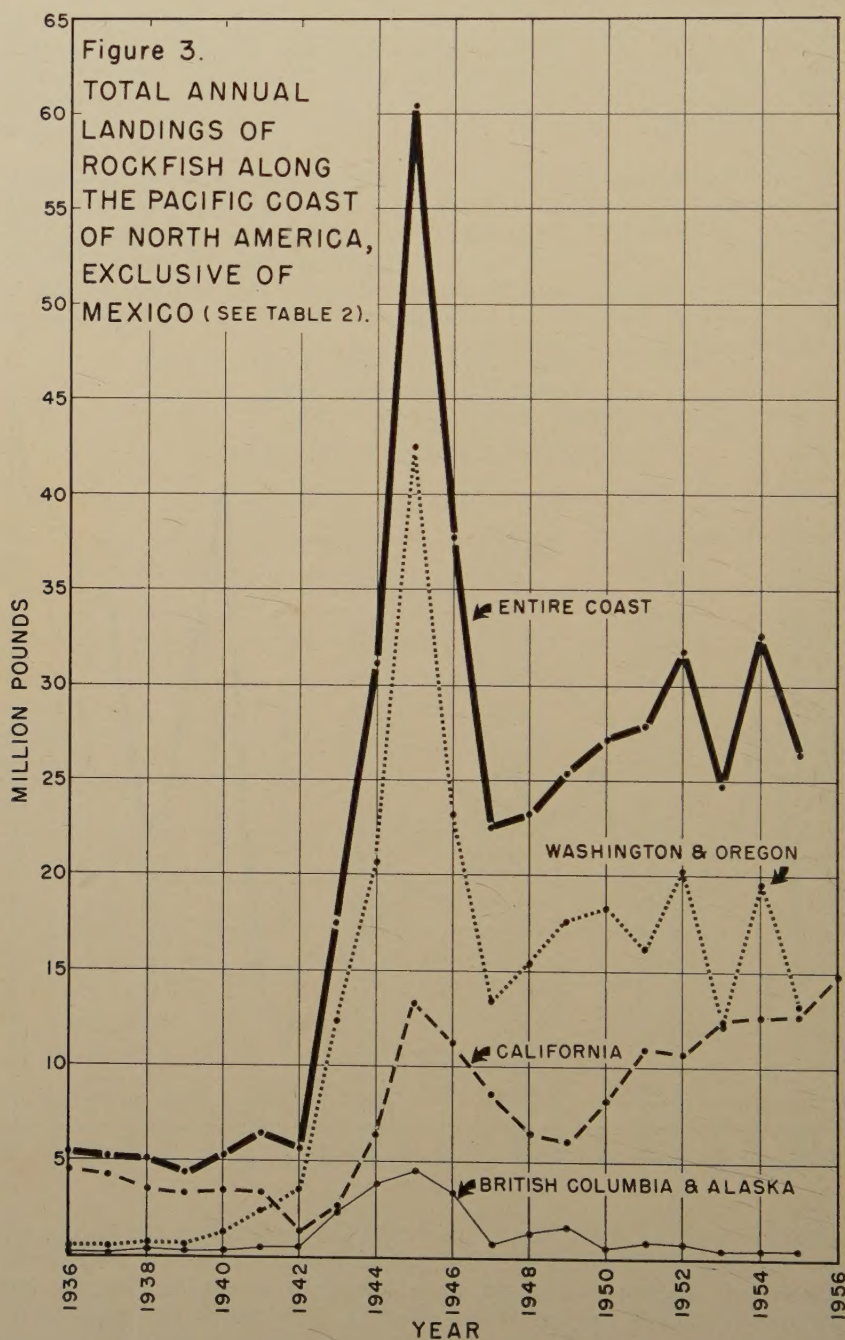


TABLE 2

Total Annual Landings of Rockfish Along the Pacific Coast of North America Exclusive of Mexico
(Figures in thousands of pounds)

Year	California	Washington and Oregon	British Columbia and Alaska	Total Coast
1936	4,604	644	350	5,598
1937	4,291	625	199	5,115
1938	3,637	733	696	5,066
1939	3,333	722	297	4,352
1940	3,571	1,287	348	5,206
1941	3,406	2,428	575	6,409
1942	1,423	3,559	683	5,665
1943	2,762	12,307	2,462	17,531
1944	6,422	20,792	3,928	31,142
1945	13,286	42,607	4,554	60,447
1946	11,161	23,315	3,494	37,970
1947	8,499	13,318	830	22,647
1948	6,541	15,414	1,245	23,200
1949	6,068	17,704	1,573	25,345
1950	8,116	18,304	678	27,098
1951	10,992	16,013	946	27,951
1952	10,720	20,220	921	31,861
1953	12,228	12,047	457	24,732
1954	12,640	19,513	519	32,672
1955	12,682	13,141	494	26,317
1956	14,944			14,944

Success of the Oregon and Washington fishery has been due to the development of a market for a rockfish called Pacific ocean perch, *Sebastes alutus*. Steady utilization of this species began in 1945 and has, in recent years, comprised about 40 percent (6 to 7 million pounds) of the annual Pacific Northwest rockfish catch. Pacific ocean perch are not found in quantity off California. In 1955 only 60,000 pounds were landed, principally in the Eureka region. This amounted to about one-half of one percent of the total statewide rockfish catch.

This increase in the Northwest followed a sensational rise in the catch of a similar fish, *Sebastes marinus*, that abounds in the north Atlantic ocean. This species was called redfish or rosefish until 1951 when the "trade" was permitted to market it as ocean perch, a more acceptable name. The annual landings of this rockfish were of minor importance until the mid-thirties when a market for frozen fillets was developed. Concomitant with a decline in the haddock catch, ocean perch landings increased rapidly from about 118,000 pounds in 1930, to 17,000,000 in 1935, and then to a peak of 178,000,000 in 1946. This increase was obtained by expanding the fishing area from the Gulf of Maine to the productive Nova Scotia grounds.

Sport

The rockfish sport catch has increased phenomenally during the past few years. This increase is startling when compared to the total sport catch of all other kinds of fish reported by nearly 600 party boat operators. Many are taken from shore, skiffs, piers, and private boats, and by skindivers. These landings are not recorded.

Before World War II the rockfish sport catch was relatively stable. Since the war, however, the catch has soared to an undreamed of 60 percent of the total sport catch of all fish.

TABLE 3
Party Boat Rockfish Catch Compared With Total Party Boat Catch

Year	Number		Percent
	Total catch ¹	Rockfish	
1936.....	1,313,473	204,627	15.58
1937.....	1,344,139	243,125	18.09
1938.....	1,281,608	239,312	18.67
1939.....	1,724,204	209,453	12.15
1940.....	1,872,838	301,355	16.09
1941-1946.....	No available records		
1947.....	2,070,432	193,377	9.34
1948.....	2,110,019	410,271	19.44
1949.....	2,339,794	570,637	24.39
1950.....	2,190,413	679,164	31.01
1951.....	2,350,644	721,808	30.71
1952.....	2,305,875	706,004	30.62
1953.....	2,280,158	696,480	30.55
1954.....	3,274,537	1,149,367	35.10
1955.....	3,113,883	1,737,707	55.81
1956.....	3,262,995	2,036,708	62.42

¹ Includes rockfish.

The question arises, what caused this tremendous increase in sport landings? There are a number of causes. Traditionally important game and food fishes off Southern California have not been plentiful in recent years. The number of anglers has increased. Their desire to take something home for display and food purposes has not changed. Satisfaction of the anglers' desire is obtained by party boat captains who turn to the rockfish holes.

Increased catches occurred throughout the fishery during the last few years (Figure 4). The Southern California sport fishery has increased disproportionately, accounting for the bulk of the landings.

Records reveal that the rockfish portion of the total sport catch increased from 10 to 15 percent before the war to 20 to 30 percent after the war. However, 1955 and 1956 rockfish sport catches spiraled upward to comprise 55 and 62 percent of the total sport take.

Even though rockfish are the most abundant group in the sport landings, each species in this group must be studied separately so that a firm approach can be made to biological and managerial problems.

GEAR

Commercial Fishing

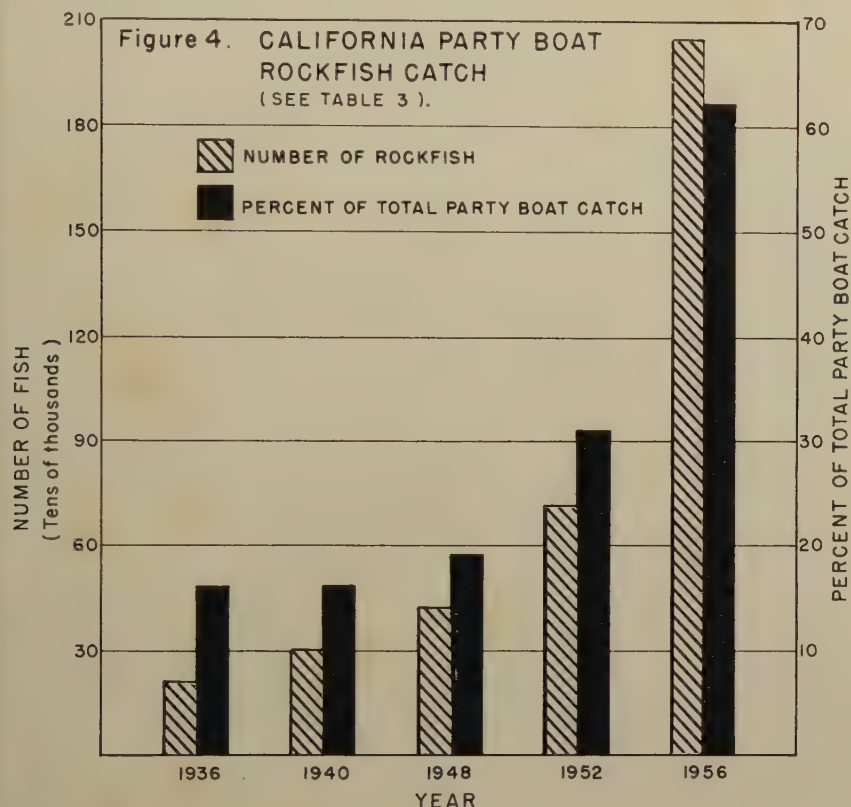
Setlines and trawl nets have played an important part in the development of the commercial rockfish fishery off California. Setlines, used as early as 1875, were the most important gear before the introduction of the balloon trawl from the Pacific Northwest late in 1943. Rockfish taken by trawlers were incidental to the catch of flatfish before the balloon trawl was introduced.

Setlines

Setlines are fished as longlines or as drop lines, from relatively small boats. The longline consists of a number of units, each with 200 or 300 hooks that are baited and fastened together in a long string. This

string, sometimes over a mile long, is weighted at both ends so that it will lie flat and fish on the bottom.

The drop line is a single unit weighted at the bottom. It has 75 to 200 hooks and is fished from a boat like a deep-water handline. One or more drop lines can be fished at the same time by using a buoy to support the upper ends.



Trawl Nets

An otter trawl net resembles a large, wedge-shaped sack that is widely open at the forward end and narrows toward the closed posterior end. An otter board or door is attached at an angle to each wing of the mouth, so that when the net is towed on the bottom of the sea the boards will veer outward and keep the mouth of the net open. The balloon trawl has a high mouth and is made of lighter material. Also, floats are added to the cork line so that the lead line will just skim or ride six to eight inches above the irregular bottom over which rockfish are found.

Sportfishing

Most sportfishermen use rod and reel or hand lines to catch rockfish. A few use heavy cotton line on a reel that is fastened to the rail of the vessel. With each type of gear several hooks are placed at intervals

on leaders or droppers according to the fisherman's preference. The majority of these hooks are baited with cut bait and fished at or near the bottom.

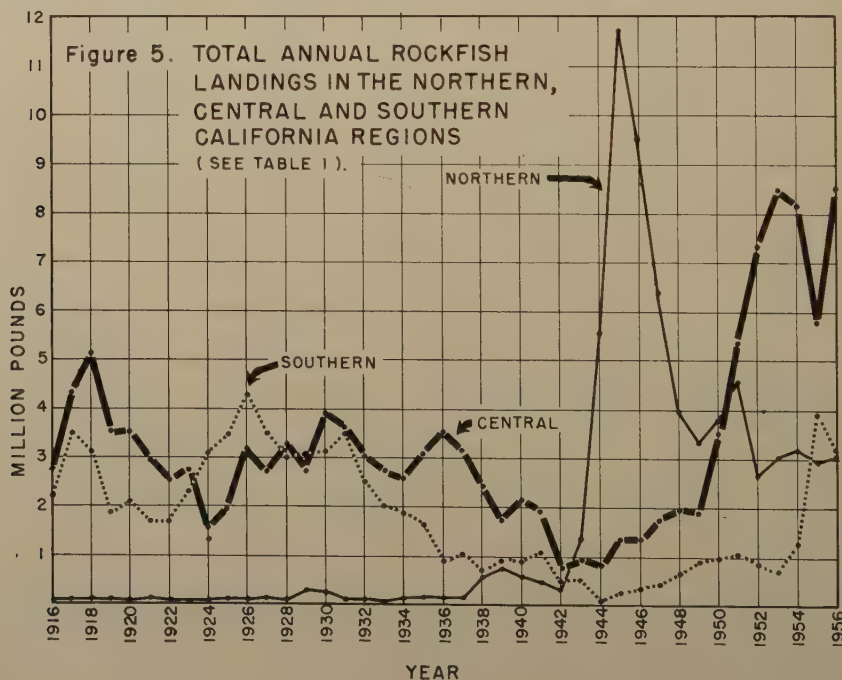
In certain localities fishermen will fish near the surface with a lure or flashing type of attractor in order to induce the fish to strike. In other localities the same type of gear is fished near the bottom. Some rockfish are taken by skindivers using a spear or some other type of impaling gear.

AREAS OF LANDING

Commercial

To evaluate the within-state commercial rockfish landings, California catches are assigned to three major geographical areas: Northern California, Central California, and Southern California (Figure 5). Northern California catches include those made from the Oregon border to Pt. Arena while Central California include those made from Pt. Arena to Piedras Blancas, and Southern California include those made from Piedras Blancas to the Mexican border. The main landing ports in Northern California are Crescent City, Eureka, Fields Landing, and Fort Bragg. In Central California they are Bodega Bay, Pt. Reyes, San Francisco, Santa Cruz, and Monterey, and in Southern California they are Morro Bay, Avila, Santa Barbara, Santa Monica, San Pedro, and San Diego.

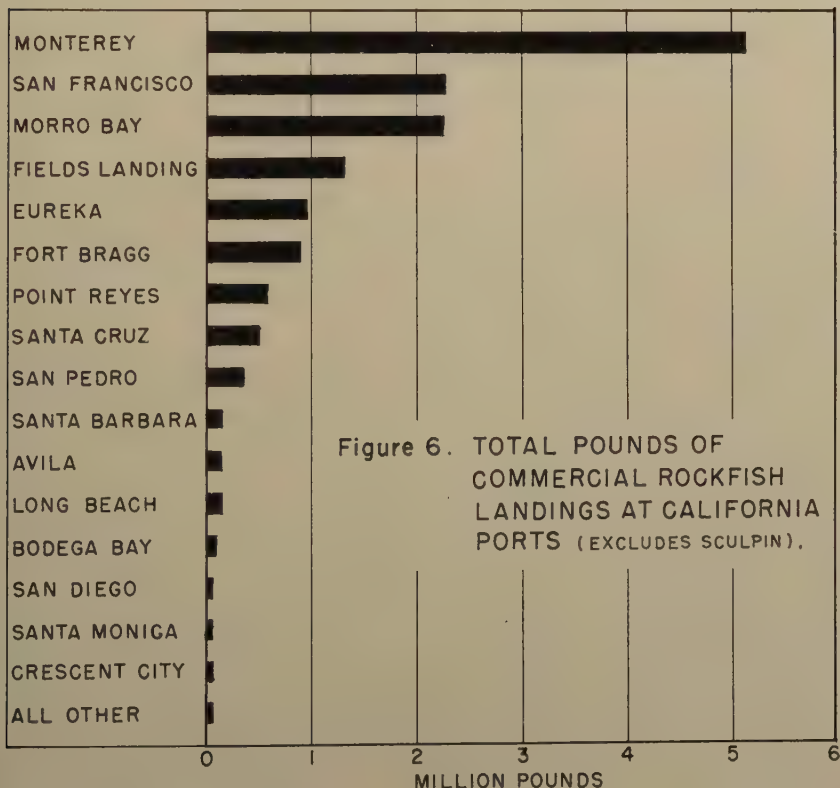
During the period 1916 to 1931, the Central California and Southern California areas were nearly equal in importance. The annual catch from each averaged 3 million pounds. After 1931, there was a steady downward trend in Southern California catches to a low of 82,000



pounds in 1944. A similar decline, though not as pronounced, occurred in Central California. Experienced fishermen feel that the severity of the decline in Southern California was due primarily to overfishing. An increased catch in the Central California region after 1943 was caused by the introduction of the balloon trawl. A similar increase did not occur to the south because trawl nets were prohibited in a large part of that area. Increased catches in Southern California during more recent years are due to the introduction of the otter trawl at Morro Bay.

TABLE 4
Rockfish Landings at California Ports—1956

Port	Total pounds	Port	Total pounds
Monterey.....	5,115,444	Avila.....	154,224
San Francisco.....	2,262,881	Long Beach.....	152,874
Morro Bay.....	2,264,308	Bodega Bay.....	90,187
Fields Landing.....	1,243,937	San Diego.....	71,314
Eureka.....	932,577	Santa Monica.....	49,473
Fort Bragg.....	896,246	Crescent City.....	46,040
Pt. Reyes.....	578,439	Balance of State.....	57,430
Santa Cruz.....	500,512		
San Pedro.....	370,337	Grand total.....	14,943,515
Santa Barbara.....	157,292		



Annual landings in the Northern California region were less than a million pounds until the balloon trawl was introduced. The efficiency of this net was demonstrated during the next two years, and in 1945 peak landings of 11,500,000 pounds were made at northern ports. A moderate increase to about 5 million pounds in 1951 was due to the Korean War demand. Since the war, landings of rockfish at Northern California ports have stabilized at about 3 million pounds per year.

San Francisco, Monterey, and Morro Bay were the three most important ports of landing for rockfish during 1956 (Figure 6). These ports accounted for 64 percent of the total rockfish catch. The next three most important ports are Fields Landing, Eureka, and Fort Bragg. Rockfish landings at all six ports accounted for 85 percent of the total catch.

Spot

The party boat catch is assigned to two major areas, Northern and Southern California. The most valuable rockfish center within the northern area lies between San Simeon and Avila. This area provided 25,273 sportfishermen with 543,304 fish during 1956. The southern "hot-spot" in Santa Monica Bay furnished 52,767 anglers with a 705,333 rockfish haul.

Before 1951, Northern California "party boaters" reeled in twice as many rockfish as did the southerners. Nowadays, however, the reverse is true.

IMPORTANCE OF SPECIES

Fifty-four species of rockfish belonging to the genus *Sebastes* live in the ocean waters along the Pacific Coast of North America. Forty-nine of these are found in California waters.

Six species, for many years, comprised the greatest part of our commercial catch. These are bocaccio and chilipepper, and the canary, vermilion, yellowtail, and black rockfish. At present, bocaccio is the dominant species in the statewide commercial catch. The six next important species are: olive, dark-blotched, widow, splitnose, and turkey-red rockfish, plus the Pacific ocean perch.

Eight species that are undesirable from a commercial standpoint because of their small size are shortbelly, stripetail, sharpchin, calico, greenstriped, halfbanded, squarespot, and pygmy rockfish. Some of these undesirable species are present in abundance on the fishing grounds. They are found in the stomachs of larger rockfish and at times appear in quantity in the "trashfish" landings.

The shortspine and longspine channel rockfish are the only species of genus *Sebastolobus* found along the Pacific Coast. The shortspine is large enough to be of some commercial importance in California. It is sometimes taken in deep water by longline and trawl net fishermen. Although the flesh is tasty, not more than about 50,000 pounds a year are landed in California. The yield of fillets from the shortspine and longspine is poor because of the large, thorny head and slender body. Occasional market landings of these two species are inappropriately called idiots, channel cod, or rock cod. The longspine is small in size and occasionally taken when fishing in depths of 300 fathoms or more.

The sculpin, *Scorpaena guttata*, is the sole representative of the genus *Scorpaena* in the ocean waters of California and is rarely caught north of Pt. Arguello. It is well known by its common name and is thus accurately recorded in statistical records. Commercial landings, however, are not great, amounting to about 100,000 pounds annually in recent years.

Sport

Many rockfishes are difficult to identify. As a result sport catch statistics provide only an estimate of the importance of individual species. These data indicate that blue rockfish are the most important species in northern sport catches, while bocaccio are more important to the south.

PRODUCTS

A Monterey sardine canner experimentally canned rockfish in 1941 but the venture failed. Small amounts have been salted and a few are marketed fresh dressed, particularly in Southern California.

A large part of the Pacific Coast rockfish catch is marketed as skinned fillets.

Seventy percent of the round weight is lost in the filleting process. This portion is reduced to meal for livestock feeding or ground with "trashfish" and used for mink and trout food. In 1955 California landings of "trashfish" for mink food totaled about one million pounds, most of which was landed in the Eureka and Fort Bragg areas. Samples of this catch indicated that about 10 percent of the total consisted of unmarketable rockfish.

Freezing

An important problem of concern in recent years has been to determine the freezer storage life of fillets from various rockfishes. Preliminary work on this problem has been conducted by the U. S. Fish and Wildlife Service in their Seattle laboratory. Several species were filleted and tested for initial palatability and appearance after having been frozen for varying periods of time (Miyauchi, D. T., and M. E. Standsby, 1952). These tests were limited to one lot of samples for each species, but the relative comparisons between species are of considerable interest. Fillet samples were tested from eight Pacific Coast species: Pacific ocean perch, and chilipepper, bocaccio, and splitnose, canary, vermilion, turkey-red, and channel rockfish. Tests were also made on the Atlantic ocean perch for comparison.

All lots of fillets from the various rockfish were tested prior to freezing and storage and found to differ in appearance, texture, and flavor. Flavor was rated as either good or very good for all species. After having been held in cold storage at 0° F. for varying periods of time, there were striking changes in appearance and flavor of some of the fillets. Pacific ocean perch was judged as having the best cold storage quality and the longest cold storage life (32 weeks). Bocaccio was second best (29 weeks). Vermilion rockfish deteriorated so rapidly that they were considered unsuitable for frozen storage. The remaining species tested had an acceptable cold storage life of 20 to 24 weeks. Atlantic ocean perch fillets were quite similar to those of Pacific ocean

perch in appearance, flavor, and texture throughout the storage period. They had an acceptable cold storage life of 29 weeks.

On the basis of these tests the armed forces are specifying, by both common and scientific name, the rockfish they will accept. At the top of the list are Pacific ocean perch and bocaccio. Both of these species have a long freezer life and can thus be shipped overseas. Species with a shorter freezer life are destined for forces stationed in this country. However, an antifish attitude, due to uncertainties in quality of the packaged domestic product, exists among servicemen. This attitude has been reported from Army installations in Japan. Servicemen were relatively satisfied with fish obtained from Japanese waters, but domestic frozen fish shipped overseas for armed forces consumption did not "go over." Consequently, the office of the Quartermaster General has proposed a long-range frozen fish research program (Petersen, 1955). The main purpose of this program is: to determine relative consumer preference for various species of fish caught during different periods of the fishing season; to note their storage life; and to find a usable method for determining freshness in frozen fish.

REGULATIONS

California has very few laws that affect sport or commercial fishing for rockfish. Commercial setlines and longlines are permitted in all ocean waters of the State except the bays of Humboldt, San Francisco, San Pablo, Morro, and San Diego, and small areas in the northern and southern sections of Monterey Bay. Also the waters surrounding Santa Catalina Island are closed to commercial fishing.

Drag net operations are not permitted within three miles of the mainland anywhere in the State, and the use or possession of these nets is prohibited south of the Santa Barbara-Ventura County line. Minimum legal size mesh permitted in drag nets is four and one-half inches inside stretch measure.

No size, bag or seasonal limits apply to the commercial taking of rockfish in California.

Sportfishermen are restricted to 20 rockfish per day to conserve the easily accessible sport species found near rocky inshore areas.

RESEARCH

Age and Growth

Wales (1952), in a study of the blue rockfish, *Sebastes mystinus*, used scales for determining the ages of specimens caught off Pacific Grove, California. He found that seven age groups were represented, but only the first four annuli on the scales could be easily recognized.

In the Washington State Department of Fisheries Annual Report for 1950, it is briefly noted that the copper rockfish, *Sebastes caurinus*, will attain an age of over 20 years.

Perlmutter and Clarke (1949), studied immature Atlantic ocean perch and found that opercular bones, otoliths, and scales had growth bands, but scales proved the best for interpreting growth. They found that the scales do not form until the spring following the year of birth (hatching takes place from mid-May to September) necessitating the addition of one year to the total age indicated by annuli on the

scales. Growth is slow in this species. Fish with nine annuli on their scales were found to have an average length, snout to fork of tail, of only eight and one-half inches. Superficial examination of scales from larger fish indicated that they must be 20 years of age or older. Veschezerov (1944) reported comparable growth for rosefish, *Sebastes marinus*, in Barents Sea.

Maturity and Fecundity

Wales (1952) found that first maturity in the blue rockfish, *Sebastes mystinus*, occurs in the third and fourth years in males, and in the fourth and fifth years in females. A 16-inch female contained 524,000 eggs.

Perlmutter and Clarke (1949) found that first maturity in the Atlantic ocean perch, does not occur until the ninth or tenth year.

Clemens and Wilby (1946) noted that a specimen of "red snapper," *Sebastes ruberrimus*, weighing 19½ pounds contained approximately 2,700,000 eggs. It was also noted that a large orange rockfish, *S. piniger*, may contain as many as 600,000 eggs.

Spawning

Fertilization is internal in the species of the genus *Sebastes* found along the Pacific Coast of North America and those found along the coast of Japan and the embryos develop within the body of the female until time of hatching. The same condition exists in *Sebastes marinus* of the Atlantic coast.

Sculpin eggs are fertilized externally. They are laid in floating masses resembling bilobed balloons.

It appears that the eggs are fertilized externally in the channel rockfish, *Sebastes alascanus* and *Sebastes altivelis*, however, little is known about the spawning habits of these two species.

Surveys conducted by the California Cooperative Sardine Research Program show that the larvae of a number of species of rockfish in the genus *Sebastes* occur in great abundance throughout the year, in some cases as far as 300 miles off the coast of California.

For blue rockfish taken in Monterey Bay, Wales (1952) noted that the larvae hatched November to January. Alverson (1953) noted a mid-winter hatching period, probably during the months of January and February, for Pacific ocean perch in Pacific Northwest waters. Clemens and Wilby (1946) noted embryos about ready to hatch in February and March in specimens of canary rockfish from off Vancouver Island.

Phillips (unpublished) has noted a December to March hatching period in central Californian waters for several species including: bocaccio and chilipepper, and widow, speckled, cow, yellowtail, canary, vermilion, shortbelly, and stripetail rockfish. In some other species it appears that the hatching period may occur later.

Okada (1955) found that the hatching period for several species of Japanese *Sebastes* was January to May. Perlmutter and Clarke (1949) cite a mid-May to September hatching period for Atlantic ocean perch taken in the Gulf of Maine.

Rearing Larvae

Morris (1956) reared the larvae of bocaccio, chilipepper, shortbelly rockfish, and stripetail rockfish for periods of 7 to 12 days. None survived the transition from the yolk sac stage although a few larvae of each species had ingested some small *Artemia* (brine shrimp).

The larvae were stripped from fish that had been caught in 100 fathoms of water off Monterey, California and were reared in salt water aquaria at the Hopkins Marine Station, Pacific Grove, California. The ovarian phase of development was apparently complete because the larvae began to swim within a few seconds after they were placed in water. At this stage the embryos are sufficiently pigmented with black so as to give the ready-to-hatch eggs a dark gray appearance.

If rockfish larvae could be reared successfully beyond this critical stage, and proper natural food made available before starvation occurs, it would be possible to illustrate all stages of development in the different species. With this knowledge, annual spawning success could be determined by means of plankton hauls and thus valuable information would be obtained for use in the management of our rockfish resources.

Tagging

Very little tagging of Pacific Coast rockfish has been undertaken. In 1929-1930, Wales (1952) tagged 1,050 blue rockfish which had been caught close to shore off Pacific Grove, California. Non-corrosive, metal strap tags were attached to the opercle. Although a total of 17 tagged fish was recaptured by hook and line fishing within 10 months, no definite information concerning the movements of this species was gained.

Tagging the species of adult rockfish found in comparatively shallow water, which are of primary interest to sportsmen, will not be difficult. However, tagging the commercially important species caught in deep water is a problem because of the difference in pressure between the surface and the deeper water.

Washington biologists, during the summer of 1956, started tagging "bloated" true cod, *Gadus macrocephalus*, brought up from deep water. These fish were deflated by puncturing the air bladder and applying pressure to the body walls (Pacific Fisherman, 1956b). It is not certain that such a method would work on rockfishes because expansion of gases in the air bladder often pushes the stomach out of place, inverting it into the throat. Also, the eyes frequently are popped. Various schemes for tagging such fish without bringing them to the surface have been considered. One of these proposals is to use detachable, marked hooks.

U. S. Fish and Wildlife Service biologists at Woods Hole, Massachusetts, considered various means by which the Atlantic ocean perch might be tagged. This species normally occurs in depths of 40-200 fathoms and is in a "bloated" condition when brought to the surface. Before any tagging of these deep living fish was attempted it was decided to investigate rumors that ocean perch occur near the surface in the late summer off Eastport, Maine. A check revealed hundreds of ocean perch feeding at or near the surface on small pelagic shrimp, *Meganyctiphanes*.

In three days of hook and line fishing during August, 1956, 317 rockfish were tagged. Biologists hope to eventually tag several thousand in this manner. The tag used was a brilliant yellow disc, pinned through the gill cover on the left side of the fish (Commercial Fisheries Review, 1956a).

It is possible that in some areas along the coast of California where upwelling of cold subsurface water occurs, deep water rockfish may be found near the surface, and thus tagging could be conducted on relatively normal fish. Also, since the immature of deep water species are found in shallower water, exploratory work may reveal areas of concentration of immature fish large enough to be tagged before they move into deeper water.

Racial Studies

No racial studies on the species of Pacific Coast rockfish have been reported. Perlmutter and Clarke (1949) subdivided the stock of Atlantic ocean perch occurring in the Gulf of Maine and off the western Nova Scotian coast into six population units. These units were determined by noting the centers of fishing, and the size composition of the catch in each center, and the degree of infestation of the fish with the copepod, *Sphyrion lumpi*.

Exploratory Fishing

No exploratory fishing has been conducted off the coast of California for new rockfish grounds, except by commercial fishermen. However, in the Pacific Northwest an uncharted seamount, on which there was an abundance of rockfish, was discovered during an exploratory cruise for albacore. The U. S. Fish and Wildlife Service vessel JOHN N. COBB ran over this uncharted seamount on August 3, 1950, about 280 miles west of Willapa Harbor, Washington. Soundings showed the shallowest portion to be 22 fathoms beneath the surface of the sea. There was also a large area 70 fathoms deep, surrounded by waters of 1,400 to 1,600 fathoms. Longline gear set at 70 fathoms yielded a good catch of large turkey-red rockfish, averaging 15 pounds each.

While passing over the seamount again on September 15, 1950, longline gear was fished at 40-160 fathoms. This time, in addition to turkey-reds, two unidentified species of rockfish were taken together with four Pacific halibut. Bottom samples and depth recorder traces indicated a rough, hard bottom with some fairly flat ledges, but unsuitable for trawling (Commercial Fisheries Review, 1950a).

CATCH STATISTICS

A program designed to improve a fishery must be based on reliable catch statistics. It is sometimes very difficult to obtain reliable rockfish catch information.

The multiplicity of species in the landings and the variation in common names within and between ports make it difficult for party boat skippers and market dealers alike to accurately report the species landed.

Uniform reporting of species in the commercial rockfish landings will be simplified if the "standard grouping" system proposed by the author can be effected. This system (Table 5) is designed to permit correct recording of the more important individual species. Less important species are grouped in what is considered "normal" combinations. In the future, if any species in a combination becomes important, it can be separated by its authorized common name. This procedure may be necessary in order to adapt a uniform rockfish reporting system to the sport catch. An improved reporting system will enable fishery biologists to evaluate trends in the total catch and to establish a sound basis for a better catch.

TABLE 5

Proposed Standardized Group Names for Reporting Commercial Rockfish Landings

Group names	Common names	Scientific names
Bocaccio.....	Bocaccio.....	<i>Sebastes paucispinis</i>
Chilipepper.....	Chilipepper.....	<i>Sebastes goodei</i>
Yellowtail rockfish.....	Yellowtail rockfish.....	<i>Sebastes flavidus</i>
	Olive rockfish.....	<i>Sebastes serranoides</i>
Widow rockfish.....	Widow rockfish.....	<i>Sebastes entomelas</i>
	Speckled rockfish.....	<i>Sebastes ovalis</i>
Blotch rockfish.....	Dark-blotched rockfish.....	<i>Sebastes crameri</i>
Canary rockfish.....	Canary rockfish.....	<i>Sebastes pinniger</i>
Genuine red rockfish.....	Vermilion rockfish.....	<i>Sebastes miniatus</i>
	Turkey-red rockfish.....	<i>Sebastes ruberrimus</i>
	Flag rockfish.....	<i>Sebastes rubrivinctus</i>
Large red rockfish.....	Brown rockfish.....	<i>Sebastes auriculatus</i>
	Whitebelly rockfish.....	<i>Sebastes vexillaris</i>
	Copper rockfish.....	<i>Sebastes caurinus</i>
	Greenspotted rockfish.....	<i>Sebastes chlorostictus</i>
	Starry rockfish.....	<i>Sebastes constellatus</i>
Small red rockfish.....	Rosy rockfish.....	<i>Sebastes rosaceus</i>
	Pink rockfish.....	<i>Sebastes eos</i>
	Honeycomb rockfish.....	<i>Sebastes umbrosus</i>
	Swordspine rockfish.....	<i>Sebastes rhodochloris</i>
	Rosethorn rockfish.....	<i>Sebastes helvomaculatus</i>
Rosefish.....	Splitnose rockfish.....	<i>Sebastes diploproa</i>
Pacific ocean perch.....	Pacific ocean perch.....	<i>Sebastes alutus</i>
Black rockfish.....	Black rockfish.....	<i>Sebastes melanops</i>
	Blue rockfish.....	<i>Sebastes mystinus</i>
	Gopher rockfish.....	<i>Sebastes carnatus</i>
	Black-and-yellow.....	<i>Sebastes chrysomelas</i>
Gopher rockfish.....	Kelp rockfish.....	<i>Sebastes atrovirens</i>
	Grass rockfish.....	<i>Sebastes rastrelliger</i>
	China rockfish.....	<i>Sebastes nebulosus</i>
	Treefish.....	<i>Sebastes serripes</i>
	Cow rockfish.....	<i>Sebastes levis</i>
	Silvergray rockfish.....	<i>Sebastes brevispinis</i>
	Aurora rockfish.....	<i>Sebastes aurora</i>
	Tiger rockfish.....	<i>Sebastes nigrocinctus</i>
Rockfish (Uncommon marketable species).....	Redstripe rockfish.....	<i>Sebastes proriger</i>
	Rougheye rockfish.....	<i>Sebastes aleutianus</i>
	Quillback rockfish.....	<i>Sebastes maliger</i>
	Coral-red rockfish.....	<i>Sebastes macdonaldi</i>
	Blackgill rockfish.....	<i>Sebastes melanostomus</i>
	Bronzespotted rockfish.....	<i>Sebastes gilli</i>
	Shortbelly rockfish.....	<i>Sebastes jordani</i>
	Stripetail rockfish.....	<i>Sebastes saxicola</i>
Rockfish (Small unmarketable species).....	Calico rockfish.....	<i>Sebastes dalli</i>
	Halfbanded rockfish.....	<i>Sebastes semicinctus</i>
	Sharpchin rockfish.....	<i>Sebastes zacentrus</i>
	Squarespot rockfish.....	<i>Sebastes hopkinsi</i>
	Pygmy rockfish.....	<i>Sebastes wilsoni</i>
	Greenstriped rockfish.....	<i>Sebastes elongatus</i>

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LIST OF COMMON AND SCIENTIFIC NAMES OF FISHES, CRUSTACEANS, AND MOLLUSKS

FISHES

Common name	Scientific name
Anchovy	<i>Engraulis mordax</i>
Barracuda, California	<i>Sphyræna argentea</i>
Bonito	<i>Sarda chiliensis</i>
Cabezon	<i>Scorpaenichthys marmoratus</i>
Cabrilla	<i>Epinephelus analogus</i>
Carp	<i>Cyprinus carpio</i>
Corvina, shortfin	<i>Cynoscion parvipinnis</i>
Croaker, white (kingfish)	<i>Genyonemus lineatus</i>
Small amounts of queenfish	<i>Seriphus politus</i>
Dolphinfish	<i>Coryphaena hippurus</i>
Eel	
California moray	<i>Gymnothorax mordax</i>
Monkeyface-eel	<i>Cebidichthys violaceus</i>
Rock-eel	<i>Xiphister mucosus</i>
Flounder	
Starry flounder	<i>Platichthys stellatus</i>
Small amounts of other flatfishes	
Flyingfish	<i>Cypselurus californicus</i>
Grouper	Species of <i>Mycteroperca</i>
Hake	<i>Merluccius productus</i>
Halfmoon	<i>Medialuna californiensis</i>
Halibut, arrowtooth	<i>Atheresthes stomias</i>
Halibut, California	<i>Paralichthys californicus</i>
Halibut, Pacific	<i>Hippoglossus stenolepis</i>
Hardhead	
Greaser blackfish	<i>Orthodon microlepidotus</i>
Hardhead	<i>Mylopharodon conocephalus</i>
Herring, Pacific	<i>Clupea pallasii</i>
Lingcod	<i>Ophiodon elongatus</i>
Mackerel, jack	<i>Trachurus symmetricus</i>
Mackerel, Pacific	<i>Pneumatophorus diego</i>
Needlefish, California	<i>Strongylura exilis</i>
Opaleye	<i>Girella nigricans</i>
Perch	
Surfperch	Members of family Embiotocidae
Pompano, California	<i>Palometa simillima</i>
Ratfish	<i>Hydrolagus collieri</i>
Rock bass	
Kelp bass	<i>Paralabrax clathratus</i>
Sand bass	<i>Paralabrax nebulifer</i>
Rockfish	All species of <i>Sebastes</i> and <i>Sebastolobus</i>
Sablefish	<i>Anoplopomo fimbria</i>
Salmon	
King	<i>Oncorhynchus tshawytscha</i>
Silver	<i>Oncorhynchus kisutch</i>
Sanddab	<i>Citharichthys sordidus</i>
Small amounts of other species	
Sardine	<i>Sardinops caerulea</i>
Sargo, California	<i>Anisotremus davidsoni</i>
Sculpin	<i>Scorpaena guttata</i>
Sculpin, staghorn	<i>Leptocottus armatus</i>
Sea bass, black	<i>Stereolepis gigas</i>
Seabass, white	<i>Cynoscion nobilis</i>
Seatrout, greenling	<i>Hexagrammos decagrammus</i>
Shad	<i>Alosa sapidissima</i>

Common name	Scientific name
Shark	
Basking	<i>Cetorhinus maximus</i>
Bonito	<i>Isurus glaucus</i>
Dogfish	<i>Squalus acanthias</i>
Leopard	<i>Triakis semifasciata</i>
Soupfin	<i>Galeorhinus zyopterus</i>
Thresher	<i>Alopias vulpinus</i>
Varying amounts of other species	
Sheep-head	<i>Pimelometopon pulchrum</i>
Sierra	<i>Scomberomorus sierra</i>
Skate	
Big	<i>Raja binoculara</i>
California	<i>Raja inornata</i>
Longnose	<i>Raja rhina</i>
Smelt	
Grunion	<i>Leuresthes tenuis</i>
Jacksmelt	<i>Atherinopsis californiensis</i>
Surf	<i>Hypomesus pretiosus</i>
Topsmelt	<i>Atherinops affinis</i>
Sole	
Dover	<i>Microstomus pacificus</i>
English	<i>Parophrys vetulus</i>
Petrale	<i>Eopsetta jordani</i>
Rex	<i>Glyptocephalus zachirus</i>
Sand	<i>Psettichthys melanostictus</i>
Varying amounts of other species	
Splittail	<i>Pogonichthys macrolepidotus</i>
Squawfish	<i>Ptychocheilus grandis</i>
Sturgeon	Member of family Acipenseridae
Swordfish	<i>Xiphias gladius</i>
Tomcod	<i>Microgadus proximus</i>
Tuna	
Albacore	<i>Thunnus germon</i>
Bigeye	<i>Parathunnus sibi</i>
Bluefin	<i>Thunnus saliens</i>
Skipjack	<i>Katsuwonus pelamis</i>
Yellowfin	<i>Neothunnus macropterus</i>
Turbot	
Curlfin	<i>Pleuronichthys decurrens</i>
Diamond	<i>Hypsopsetta guttulata</i>
Hornyhead	<i>Pleuronichthys verticalis</i>
Small amounts of other species	
Wahoo	<i>Acanthocybium solandri</i>
Whitebait	<i>Allosmerus elongatus</i>
	<i>Spirinchus starksi</i>
	Young of several other species
Whitefish, ocean	<i>Caulolatilus princeps</i>
Yellowtail	<i>Seriola dorsalis</i>

CRUSTACEANS

Crab	<i>Cancer magister</i>
Crab, rock	Other species of <i>Cancer</i>
Lobster, spiny	<i>Panulirus interruptus</i>
Prawn	<i>Pandalus</i> species
Shrimp, bay	<i>Crago franciscorum</i>
	<i>Crago nigricauda</i>
Shrimp, ocean	<i>Pandalus jordani</i>
	<i>Pandalus platyceros</i>

MOLLUSKS

Common name	Scientific name
Abalone	
Pink	<i>Haliotis corrugata</i>
Red	<i>Haliotis rufescens</i>
Southern green	<i>Haliotis fulgens</i>
White	<i>Haliotis sorenseni</i>
Clam	
Gaper	<i>Schizothaerus nuttalli</i>
Jackknife	<i>Tagelus californianus</i>
Pismo	<i>Tivela stultorum</i>
Washington	<i>Saxidomus nuttalli</i>
Octopus	<i>Paroctopus appollyon</i>
Oyster	
Eastern	<i>Crassostrea virginica</i>
Kumamoto	<i>Crassostrea gigas</i> var.
Native	<i>Ostrea lurida</i>
Pacific, giant	<i>Crassostrea gigas</i>
Squid	<i>Loligo opalescens</i>

EXPLANATION OF TABLES

Tables published in this bulletin supply the complete available record of all fish, mollusks, and crustaceans landed in California by commercial fishing vessels or shipped into California for processing.

Fishing vessels possessing California Fish and Game plates and delivering fish to foreign ports for transshipment to California cannot always be identified and the bulk of their landings cannot be separated in the record. Shipment figures are complete for fish that are processed. Statistics on shipments of fish destined for sale, either fresh or frozen, or for transshipment are not included because our records are incomplete.

Condition or extent of cleaning is not always indicated on the source documents (fish receipts) and for the various species this cannot be ascertained. We therefore use the weight as given by the dealer.

Mollusks and crustaceans are often purchased by number or container size rather than by weight. It is desirable to show all catch figures in round weight. Hence appropriate average conversion factors have been developed as follows:

Crab, market	2 lbs. each
Abalone, red	50 lbs. per doz.
Abalone, pink	35 lbs. per doz.
Abalone, southern green	35 lbs. per doz.
Clams, Mexican Pismo	8 lbs. round wt. per 1 lb. cleaned wt.
Clams, Washington	7 lbs. per doz.
Oyster, eastern	30 lbs. per hundred
Oyster, giant Pacific	50 lbs. per hundred

The value of the species of fish is based on the value to the fishermen at the time of delivery. When the price per pound is not indicated on the fish receipt, an average price is calculated for each region and

applied to the unpriced fish. The statistical regions and counties contained therein are shown in Figure 1.

Occasionally small poundages of fish are sold in counties away from the coastal regions. In these instances credit is given to the nearest port and region. Halibut delivered to the San Francisco region in previous years was prorated and published as 90 percent Pacific halibut and 10 percent California halibut. Recent investigation indicates that 90 to 99 percent of the landings are California halibut, instead of Pacific halibut. Hence, all halibut landed in the San Francisco region is published as California halibut except when the variety is specifically designated as Pacific or Northern by the fish dealers.

Most notable change in this year's bulletin is the separation of the more important species of sole. Dover, English, petrale, rex and sand sole are recorded individually. Arrowtooth halibut, also separated, was formerly combined with the aforementioned species in the general sole category. This change was made to answer requests for the pounds and value of the separate species of sole. Changes cause problems, in this case anyone wanting to make comparisons with previous years sole landings would have to combine the species mentioned above with the general category, sole unclassified.

The trend in total landings is shown in Table 6 and Figure 7 for the years 1916-1955. The pounds and value for 1955 and 1956 are compared in Tables 7 and 8 and Figures 8 and 9. The number of licensed fishermen and boats registered yearly are given in Tables 9 through 13. The term "yearly" is used as it distinguishes license year April 1 through March 31 from calendar year as used in the remaining tables.

Detail poundages by species and regions for 1955 are included in Tables 14-23, and for 1956 in Tables 32-41. Value figures for 1955 are given in Tables 24-31 and for 1956 in Tables 42-49. The catch of the most important fish taken by party boat sportfishermen is given by numbers in Table 50 for the years 1947-1956. The live bait catch for 1952 through 1956 is included in Table 51.

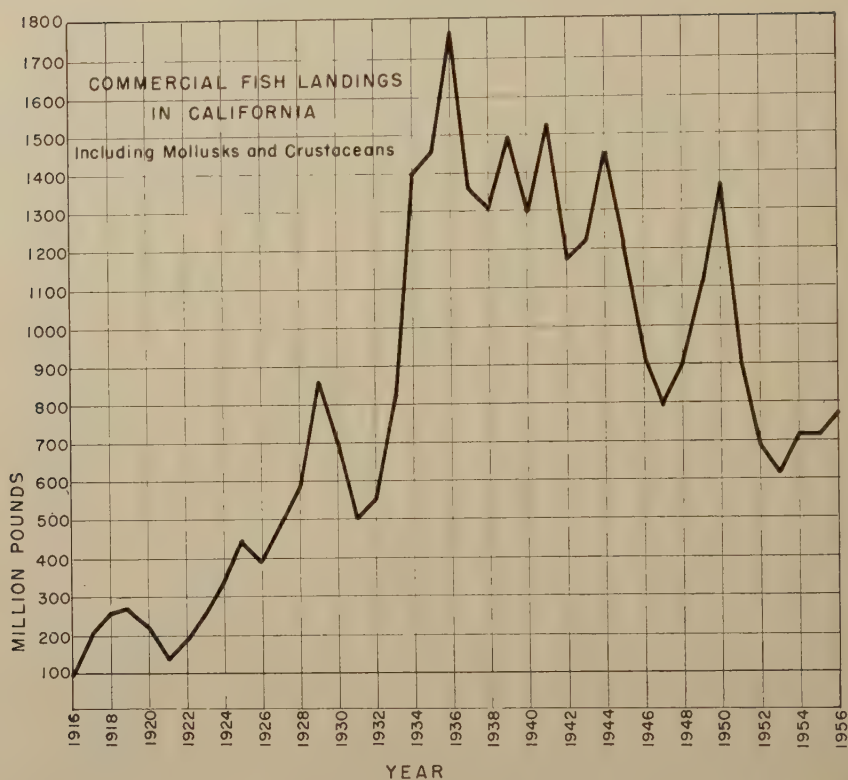


Figure 7. TOTAL ANNUAL LANDINGS AND SHIPMENTS INTO CALIFORNIA.
INCLUDES SARDINE DELIVERIES TO REDUCTION SHIPS 1930-1938
(SEE TABLE 6).

TABLE 6

Total Annual Landings and Shipments Into California of Commercial Fish, Mollusks, and Crustaceans
Includes Sardine Deliveries to Reduction Ships During 1930 Through 1938

Year	Pounds	Year	Pounds
1916.....	95,002,695	1936.....	1,764,900,136
1917.....	209,876,670	1937.....	1,362,983,717
1918.....	261,134,265	1938.....	1,310,595,651
1919.....	266,270,240	1939.....	1,486,534,906
1920.....	222,004,376	1940.....	1,297,517,441
1921.....	135,347,826	1941.....	1,529,147,645
1922.....	182,343,333	1942.....	1,173,414,078
1923.....	253,874,581	1943.....	1,234,049,119
1924.....	340,445,919	1944.....	1,459,445,859
1925.....	437,502,232	1945.....	1,216,467,433
1926.....	394,964,393	1946.....	919,850,476
1927.....	487,166,143	1947.....	795,498,998
1928.....	583,526,751	1948.....	900,540,206
1929.....	856,854,055	1949.....	1,135,325,345
1930.....	702,188,795	1950.....	1,366,596,282
1931.....	502,389,875	1951.....	904,088,178
1932.....	556,139,053	1952.....	694,976,990
1933.....	821,805,007	1953.....	618,898,616
1934.....	1,390,798,650	1954.....	713,406,246
1935.....	1,448,016,584	1955.....	710,713,523
		1956.....	772,548,722

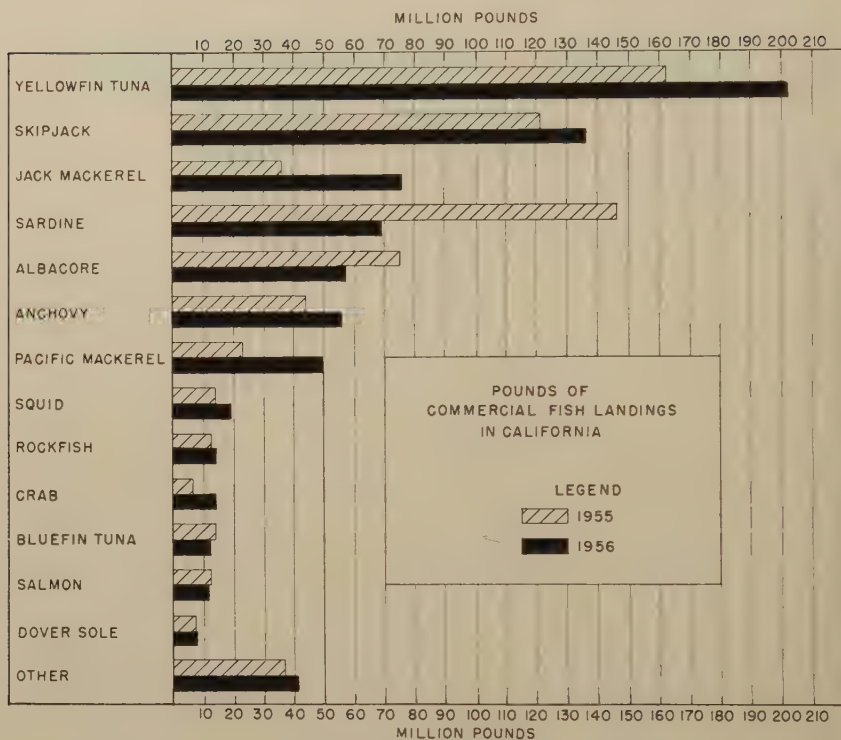


Figure 8 COMPARATIVE LANDINGS IN 1955 AND 1956 OF THE MORE IMPORTANT COMMERCIAL SPECIES. INCLUDES SHIPMENTS AND FISHING BOAT LANDINGS. (SEE TABLE 7).

TABLE 7
Total Commercial Fish Landings and Shipments Into California

1955		1956	
Species	Pounds	Species	Pounds
Yellowfin tuna.....	162,818,007	Yellowfin tuna.....	203,885,489
Sardine.....	145,607,749	Skipjack.....	135,995,434
Skipjack.....	120,524,979	Jack mackerel.....	75,762,110
Albacore.....	73,846,973	Sardine.....	69,561,145
Anchovy.....	44,691,582	Albacore.....	57,377,986
Jack mackerel.....	35,754,707	Anchovy.....	56,920,585
Pacific mackerel.....	23,311,211	Pacific mackerel.....	50,013,009
Squid.....	14,271,968	Squid.....	19,483,984
Bluefin tuna.....	13,952,523	Rockfish.....	14,943,515
Rockfish.....	12,681,697	Crab.....	14,320,459
Salmon.....	12,416,795	Bluefin tuna.....	12,788,843
Dover sole.....	8,185,501	Salmon.....	11,602,753
Crab.....	6,119,320	Dover sole.....	8,268,424
Abalone.....	4,185,875	Giant Pacific oyster.....	6,101,220
English sole.....	4,134,779	Abalone.....	4,284,063
Petrale sole.....	3,619,503	English sole.....	3,824,952
Sablefish.....	2,518,207	Sablefish.....	3,471,819
Pacific herring.....	1,946,521	Petrale sole.....	2,830,058
Giant Pacific oyster.....	1,635,067	Pacific herring.....	1,735,776
Pismo clam.....	1,578,976	Hake.....	1,376,217
California barracuda.....	1,140,959	Pismo clam.....	1,274,312
Rex sole.....	1,094,437	Ocean shrimp.....	1,168,519
All others.....	14,676,187	Rex sole.....	1,147,373
		White seabass.....	1,090,710
		Shark.....	1,085,314
		Arrowtooth halibut.....	1,070,597
		All others.....	11,164,056
Total pounds.....	710,713,523	Total pounds.....	772,548,722

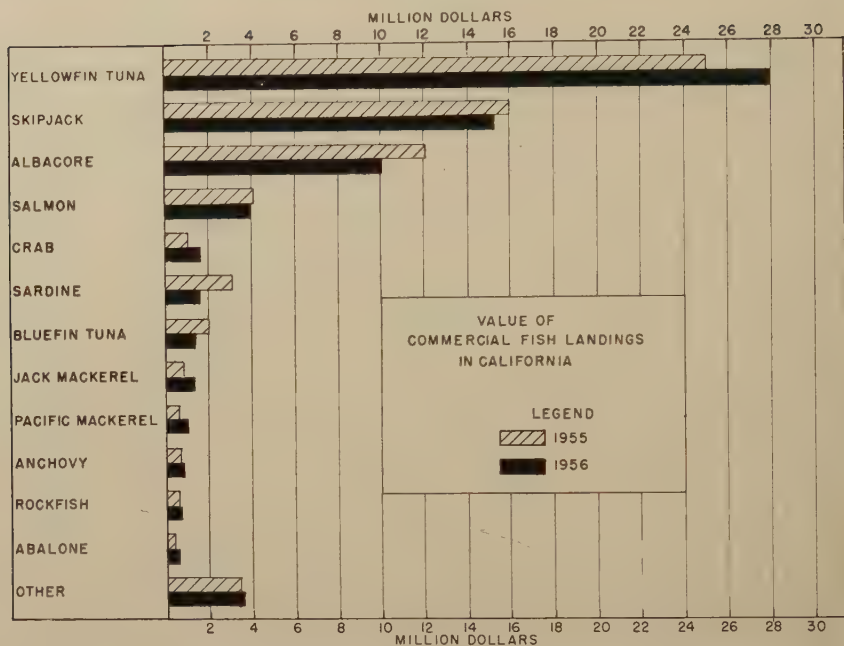


Figure 9. COMPARATIVE VALUES IN 1955 AND 1956 OF THE MORE IMPORTANT COMMERCIAL SPECIES. INCLUDES SHIPMENTS AND FISHING BOAT LANDINGS. (SEE TABLE 8).

TABLE 8

Value of Commercial Fish Landings and Shipments Into California

1955		1956	
Species	Value	Species	Value
Yellowfin tuna.....	\$24,479,754	Yellowfin tuna.....	\$28,003,747
Skipjack.....	15,984,232	Skipjack.....	15,544,901
Albacore.....	12,175,319	Albacore.....	10,075,357
Salmon.....	4,087,719	Salmon.....	4,030,755
Sardine.....	3,069,453	Crab.....	1,816,116
Bluefin tuna.....	1,985,392	Sardine.....	1,673,705
Crab.....	976,305	Bluefin tuna.....	1,669,979
Jack mackerel.....	711,724	Jack mackerel.....	1,531,587
Anchovy.....	596,584	Pacific mackerel.....	1,065,512
Pacific mackerel.....	531,657	Anchovy.....	721,792
Rockfish.....	513,851	Rockfish.....	630,848
Spiny lobster.....	433,719	Abalone.....	480,584
Abalone.....	423,253	Dover sole.....	391,299
Dover sole.....	395,452	Spiny lobster.....	384,722
All others.....	2,750,030	All others.....	3,084,101
Total value.....	\$69,114,444	Total value.....	\$71,105,005

TABLE 9
Yearly Number of Licensed Commercial Fishermen in California

1947-1948	12,894	1952-1953	11,566
1948-1949	14,261	1953-1954	11,372
1949-1950	14,962	1954-1955	11,647
1950-1951	14,600	1955-1956	10,277
1951-1952	13,193	1956-1957	9,811

TABLE 10
Number of Commercial Fishermen Licensed by Region and License Year

Region of residence	Number of fishermen	
	1955-1956	1956-1957
Eureka	843	1,016
Sacramento	472	383
San Francisco	1,309	1,413
Monterey	958	905
Santa Barbara	458	479
Los Angeles	3,162	2,685
San Diego	2,503	2,299
Alaska, Washington and Oregon fishermen licensed in California	528	599
Mexican nationals licensed in California	31	18
Other registry	13	14
Totals	10,277	9,811

TABLE 11

Yearly Number of Fishing Boats, Grouped According to Length

Season	Under 40 feet	40 to 84 feet	85 feet and over	Total
1947-1948	3,639	1,201	202	5,042
1948-1949	4,088	1,378	256	5,722
1949-1950	4,294	1,595	271	6,160
1950-1951	4,127	1,710	266	6,103
1951-1952	3,927	1,631	279	5,837
1952-1953	3,599	1,563	272	5,434
1953-1954	3,589	1,595	246	5,430
1954-1955	3,167	1,520	215	4,902
1955-1956	2,949	1,297	204	4,450
1956-1957	2,886	1,267	199	4,352

TABLE 12

Number of Fishing Boats, Grouped by Length and Region of Home Port During the 1955-1956 Season

Region of home port	Number of boats, grouped by length						Total number of boats for each region
	Up to 24 feet	25 to 39 feet	40 to 64 feet	65 to 84 feet	85 to 99 feet	100 feet and over	
Eureka	145	247	84	4	1	2	483
Sacramento	30	164	9	1			204
San Francisco	52	518	167	4		2	743
Monterey	146	237	62	21	2		468
Santa Barbara	35	126	72	1			234
Los Angeles	199	637	367	88	35	17	1,343
San Diego	123	234	163	20	36	106	682
Alaska, Washington and Oregon	2	54	210	24		3	293
Total number of boats	732	2,217	1,134	163	74	130	14,450

¹ The owners of 809 of these vessels were issued fishing party permits.

TABLE 13

Number of Fishing Boats, Grouped by Length and Region of Home Port During the 1956-1957 Season

Region of home port	Number of boats, grouped by length						Total number of boats for each region
	Up to 24 feet	25 to 39 feet	40 to 64 feet	65 to 84 feet	85 to 99 feet	100 feet and over	
Eureka	191	270	90	4	1	2	558
Sacramento	31	156	5				192
San Francisco	101	499	157	10			767
Monterey	130	242	78	21	2		473
Santa Barbara	33	136	65	3			237
Los Angeles	169	535	340	73	34	19	1,170
San Diego	99	215	166	24	35	102	641
Alaska, Washington and Oregon	3	76	213	18	3	1	314
Total number of boats	757	2,129	1,114	153	75	124	14,352

¹ The owners of 722 of these vessels were issued fishing party permits.

TABLE 14
Origin of Shipments of Fresh Fish Into California During 1955

Shipped from	Shipped to					Total pounds
	San Francisco region	Monterey region	Santa Barbara region	Los Angeles region	San Diego region	
Continental United States:						
Eel.....				508		508
Shad.....	21,568					21,568
Tuna, yellowfin (Gulf of Mexico)				23,007		23,007
Miscellaneous fish.....	6,150			114,180		120,330
Oregon, Washington, Canada and Alaska:						
Halibut, Pacific.....	40,529					40,529
Sablefish.....	221,689			230,781		452,470
Salmon.....	81,656			356,651		438,307
Shad.....	6,285					6,285
Sturgeon.....				21,665		21,665
Miscellaneous fish.....	10,940			95		11,035
South of the international boundary:						
Cabrilla.....				15,362	982	16,344
Grouper.....				9,544	921	10,465
Halibut, California.....					10,460	10,460
Mackerel, Pacific.....					909	909
Sculpin.....					674	674
Seabass, white.....					263	263
Tuna, albacore.....					3,193	3,193
Tuna, skipjack.....				156,791	215,777	372,568
Tuna, yellowfin.....				87,014	64,395	151,409
Wahoo.....				132		132
Mollusk:						
Clam, Pismo.....				1,578,976		1,578,976
South America:						
Bonito.....				2,935		2,935
Tuna, albacore.....				392,641	2,876	395,517
Tuna, bigeye.....	12,186		2,530	5,896		20,612
Tuna, skipjack.....	1,136,739	376,491		10,028,686	6,571,123	18,113,039
Tuna, yellowfin.....	47,183	226,139		3,457,755	3,866,642	7,597,719
Japan:						
Salmon.....				746		746
Swordfish.....				1,081		1,081
Tuna, albacore.....	4,787,991			38,788,908	869,066	44,445,965
Tuna, bigeye.....	100,277			391,645		491,922
Tuna, skipjack.....				148,416		148,416
Tuna, yellowfin.....	7,513,530		2,338,254	22,902,224		32,754,008
Australia:						
Tuna, bluefin.....				343,346		343,346
Total pounds.....	13,986,723	602,630	2,340,784	79,058,985	11,607,281	107,596,403

Recapitulation

	Pounds		Pounds
Bonito.....	2,935	Sturgeon.....	21,665
Cabrilla.....	16,344	Swordfish.....	1,081
Eel.....	508	Tuna, albacore.....	44,844,675
Grouper.....	10,465	Tuna, bigeye.....	512,534
Halibut, California.....	10,460	Tuna, bluefin.....	343,346
Halibut, Pacific.....	40,529	Tuna, skipjack.....	18,634,023
Mackerel, Pacific.....	909	Tuna, yellowfin.....	40,526,143
Sablefish.....	452,470	Wahoo.....	132
Salmon.....	439,053	Miscellaneous fish.....	131,365
Sculpin.....	674	Mollusk:	
Seabass, white.....	263	Clam, Pismo.....	1,578,976
Shad.....	27,853		
		Total pounds.....	107,596,403

TABLE 15

**Origin of the Commercial Fish Landings and Shipments Into California During 1955
Fishing Boat Landings**

Species	Fishing boat landings				Shipments ¹	Total pounds of fishing boat landings and shipments combined
	California	North of the state boundary	South of the international boundary	Total fishing boat landings		
Anechovy.....	44,691,582			44,691,582		44,691,582
Barracuda, California.....	322,831		818,128	1,140,959		1,140,959
Bonito.....	40,354		96,636	136,990	2,935	139,925
Cabezon.....	6,944			6,944		6,944
Cabrilla.....			100,769	100,769	16,344	117,113
Carp.....	734,518			734,518		734,518
Croaker, white (kingfish).....	818,997		491	819,488		819,488
Eel.....					508	508
Flounder.....	646,948	3,232		650,180		650,180
Flyingfish.....	22,565			22,565		22,565
Grouper.....			245,520	245,520	10,465	255,985
Hake.....		73,538		956,545		956,545
Halfmoon.....	34,050		360	34,410		34,410
Halibut, arrowtooth.....	684,123	64,126		748,249		748,249
Halibut, California.....	363,834		145,968	509,802	10,460	520,262
Halibut, Pacific.....	51,942			51,942	40,529	92,471
Headhead.....	64,436			64,436		64,436
Herring, Pacific.....	1,946,521			1,946,521		1,946,521
Lingcod.....	934,200	30,726		964,926		964,926
Mackerel, jack.....	35,754,707			35,754,707		35,754,707
Mackerel, Pacific.....	23,310,005		297	23,310,302	909	23,311,211
Opaleye.....	6,117			6,117		6,117
Perch.....	136,554			136,554		136,554
Pompano, California.....	79,294		10	79,304		79,304
Ratfish.....	18,533			18,533		18,533
Rock bass.....			5,862	5,862		5,862
Rockfish.....	12,345,411	269,001	67,285	12,681,697		12,681,697
Sablefish.....	2,010,112	55,625		2,065,737	452,470	2,518,207
Salmon.....	11,939,364	38,378		11,977,742	439,053	12,416,795
Sanddab.....	778,839	2,688		781,527		781,527
Sardine.....	145,607,749			145,607,749		145,607,749
Sargo, California.....	695			695		695
Sculpin.....	105,174		2,851	108,025	674	108,699
Sculpin, staghorn.....	1,201			1,201		1,201
Sea bass, black.....	7,663		357,824	365,487		365,487
Seabass, white.....	544,953		369,912	914,865	263	915,128
SeatROUT, greenling.....	752			752		752
Shad.....	478,454			478,454	27,853	506,307
Shark.....	546,968		29,233	576,201		576,201
Sheep-head.....	10,966		2,186	13,152		13,152
Sierra.....			4,240	4,240		4,240
Skate.....	152,622			152,622		152,622
Smelt.....	780,172			780,172		780,172
Sole, Dover.....	7,204,089	981,412		8,185,501		8,185,501
Sole, English.....	4,111,676	23,103		4,134,779		4,134,779
Sole, petrale.....	3,340,980	278,523		3,619,503		3,619,503
Sole, rex.....	1,070,834	23,603		1,094,437		1,094,437
Sole, sand.....	91,590	982		92,572		92,572
Sole, unclassified.....	19,452			19,452		19,452
Splittail.....	1,590			1,590		1,590
Squawfish.....	114			114		114
Sturgeon.....					21,665	21,665
Swordfish.....	112,647		22,012	134,659		135,740
Tomcod.....	2,869			2,869		2,869
Tuna, albacore.....	9,312,029		19,690,269	29,002,298	44,844,675	73,846,973
Tuna, bigeye.....					512,534	512,534
Tuna, bluefin.....	2,477,735		11,131,442	13,609,177	343,346	13,952,523
Tuna, skipjack.....	1,236		101,890,720	101,890,956	18,634,023	120,524,979
Tuna, yellowfin.....			122,291,864	122,291,864	40,526,143	162,818,007
Turbot.....	99,981	505		100,486		100,486

TABLE 15—Continued

Origin of the Commercial Fish Landings and Shipments Into California During 1955
Fishing Boat Landings

Species	Fishing boat landings				Shipments ¹	Total pounds of fishing boat landings and shipments combined
	California	North of the state boundary	South of the international boundary	Total fishing boat landings		
Wahoo.....			22,862	22,862	132	22,994
Whitebait.....	214,558			214,558		214,558
Whitefish, ocean.....	1,267		1,045	2,312		2,312
Yellowtail.....	5,570		158,752	164,322		164,322
Miscellaneous fish.....	4,486			4,486	131,365	135,851
Crustacean:						
Crab.....	6,113,884	5,436		6,119,320		6,119,320
Crab, rock.....	54,051			54,051		54,051
Lobster, spiny.....	855,416		3,709	859,125		859,125
Prawn.....	1,164			1,164		1,164
Shrimp, bay.....	682,731			682,731		682,731
Shrimp, ocean.....	838,556	100		838,656		838,656
Mollusk:						
Abalone.....	4,185,875			4,185,875		4,185,875
Clam, gaper.....	2,002			2,002		2,002
Clam, jackknife.....	36,837			36,837		36,837
Clam, Pismo.....					1,578,976	1,578,976
Clam, Washington.....	7,491			7,491		7,491
Octopus.....	26,346			26,346		26,346
Oyster, eastern.....	140,918			140,918		140,918
Oyster, native.....	18,560			18,560		18,560
Oyster, giant Pacific.....	1,635,067			1,635,067		1,635,067
Squid.....	14,271,968			14,271,968		14,271,968
Miscellaneous mollusk.....	169			169		169
Total pounds.....	343,806,895	1,850,978	257,459,247	603,117,120	107,596,403	710,713,523

¹ For origin of shipments refer to Table 14.

TABLE 16
Monthly Landings and Shipments Into California During 1955

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Fishing boat landings:													
Anchovy.....	5,340,379	4,648,070	7,021,713	5,920,498	7,640,775	2,805,430	2,958,098	3,319,351	873,880	469,477	1,934,016	1,759,885	44,691,582
Barracuda, California.....	36,508	174,649	154,617	28,766	160,765	112,109	48,516	66,639	83,993	86,197	58,570	129,450	1,140,950
Bonito.....	77,929	11,639	975	37	2,275	1,805	399	108	555	4,028	25,056	12,191	136,900
Cabazon.....	2,366	1,517	865	865	244	559	210	371	125	230	381	6,914	10,769
Cabrilla.....	24,973	8,473	17,209	2,755	5,867	12,906	-----	3,199	-----	6,345	10,015	9,027	100,769
Crab.....	48,985	43,639	46,265	75,891	82,931	38,115	31,967	25,008	70,118	92,325	62,833	116,421	734,518
Croaker, white (kingfish).....	14,175	14,175	68,369	47,361	235,051	58,788	65,899	45,834	126,326	79,327	38,252	26,231	819,488
Floynder.....	21,181	94,895	77,413	24,175	92,276	34,611	48,099	107,926	80,902	35,012	24,856	8,834	650,180
Fluyngfish.....	-----	-----	-----	-----	4,663	10,809	3,874	-----	2,531	-----	-----	-----	22,565
Grouper.....	77,418	35,522	21,315	7,660	2,779	25,695	580	3,048	-----	17,095	18,141	36,367	245,520
Hake.....	22,607	3,975	28,420	75,821	37,367	100,765	152,635	205,030	138,227	112,561	51,759	27,378	956,545
Hallmoon.....	1,100	3,759	3,891	620	2,412	2,775	1,477	1,379	2,982	6,849	1,831	5,335	34,410
Halibut, Arrowtooth.....	18,800	5,589	32,035	89,233	23,346	94,179	102,190	159,638	75,558	87,354	44,769	15,559	748,249
Halibut, California.....	73,079	63,599	53,075	38,522	28,103	27,364	47,831	43,269	24,545	41,644	31,131	37,730	509,802
Halibut, Pacific.....	-----	-----	-----	-----	24,344	10,680	9,655	210	6,922	131	-----	-----	51,942
Hardhead.....	5,814	6,642	13,938	2,930	5,879	64	50	-----	54	3,785	11,248	14,031	64,436
Herring, Pacific.....	595,059	526,911	107,502	94,190	230,985	109,985	184,839	34,277	37,615	3,004	-----	22,154	1,946,521
Lingcod.....	19,933	43,695	83,591	85,644	86,255	160,689	127,380	122,279	84,145	80,377	36,922	24,016	964,926
Mackerel, jack.....	104,594	1,294,171	1,024,073	1,157,081	475,598	268,846	8,192,790	4,099,329	632,700	1,441,070	7,203,188	9,861,267	35,754,707
Mackerel, Pacific.....	97,059	1,048,755	2,022,962	160,251	1,155,114	1,541,328	2,872,882	3,654,873	1,700,620	2,377,729	2,736,526	3,942,203	23,310,302
Opaleye.....	228	233	471	-----	1,205	859	118	-----	648	980	827	548	6,117
Perch.....	7,580	8,730	34,538	28,892	-----	810	10,728	20,818	11,381	5,655	3,479	3,943	136,551
Pompano, California.....	77	614	4,635	11,123	11,319	4,593	17,170	9,992	5,584	9,988	2,996	1,213	79,304
Ratfish.....	650	100	2,400	2,255	5,750	250	933	-----	-----	-----	2,695	3,100	18,553
Rock bass.....	1,920	2,142	837	-----	95	-----	-----	375	110	383	-----	-----	5,862
Rockfish.....	1,004,318	1,264,196	1,425,816	923,439	1,021,824	1,168,138	827,308	1,036,547	1,090,659	1,233,934	909,411	776,107	12,681,697
Sablefish.....	138,693	144,019	272,641	220,831	140,767	183,188	183,188	147,516	180,819	139,659	143,651	121,874	2,065,757
Salmon.....	3,974	903	891	15,606	1,254,529	2,774,558	2,559,796	2,269,494	3,092,829	136	2,052	2,974	11,977,742
Sandab.....	58,235	56,048	56,734	69,077	73,043	61,731	98,602	76,106	58,958	56,505	31,126	781,527	781,527
Sardine.....	1,051,614	93,400	122,435	64,342	171,943	201,904	231,133	412,798	625,299	27,615,620	74,145,099	40,872,162	145,607,749
Sargo, California.....	6,399	3,636	9,036	2,189	5,103	675	23,916	19,987	5,969	1,432	2,977	2,501	695
Sculpin.....	60	-----	-----	-----	-----	20	-----	-----	-----	-----	-----	-----	108,625
Sculpin, staghorn.....	18,402	22,917	40,014	37,537	14,837	53,968	4,055	16,243	3,746	305	403	308	1,201
Sea bass, black.....	14,916	33,082	39,981	10,225	104,835	94,299	65,426	178,759	292,141	45,647	57,062	51,059	365,487
Seabass, white.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	88,212	61,639	21,350	914,865

	193	61	113,396	351,020	746	193	123	59	87	36	752
Seatrout, greenling											
Shad	37,079	33,051	13,292	52,427	35,630	26,709	31,732	60,666	34,643	40,178	478,454
Shark	2,194	3,060	580	61	199	225	832	76	814	1,587	576,201
Sherp-head		3,980		110					150		13,152
Sierra											4,240
Skate	19,395	22,684	9,836	19,135	4,595	13,335	9,938	9,938	8,255	9,358	152,622
Smelt	29,384	106,247	150,035	98,073	55,073	55,451	58,481	46,729	20,371	22,654	780,172
Sole, Dover	32,065	65,047	860,399	861,892	1,353,544	1,127,744	1,012,549	804,626	1,110,387	277,136	183,325
Sole, English	313,682	350,424	366,429	450,068	296,104	255,862	439,545	513,960	369,542	250,955	8,185,501
Sole, petrale	388,664	129,280	189,577	182,006	367,573	288,575	432,241	349,575	321,252	598,139	4,134,779
Sole, rex	101,613	87,793	97,857	70,578	95,110	73,802	80,470	88,696	103,480	98,895	214,588
Sole, sand	10,008	14,250	3,063	8,206	1,269	87	21,283	16,106	5,664	3,763	1,094,437
Sole, unclassified	972	2,193	5,997	1,117	2,845	1,628	1,126	1,254	571	185	92,572
Spittail	831	681	251								19,452
Squawfish		7	25	82							1,590
Swordfish											114
Tomcod		531				3,052	34,636	52,557	39,004	5,410	134,659
Tuna, albacore	1,377		97				455	1,678	108		2,889
Tuna, bluefin	241,689	54,517		119,477	16,002	8,493,982	7,203,181	5,285,944	4,053,944	2,432,023	1,516,259
Tuna, skipjack	9,944,875	6,159,204		8,530,329	1,372,014	1,050,735	7,247,069	847,589	425,665	861,714	1,251,091
Tuna, yellowfin	4,692,625	2,811,549	3,668,043	8,037,519	6,841,277	5,000,107	9,386,385	1,827,252	1,113,588	13,975,091	16,722,788
Turbot	14,765	19,453	12,282,536	25,562,482	11,520,059	16,240,149	2,377,468	13,434,76	17,056,327	122,291,864	101,890,956
Wahoo		6,709	3,136	10,670	875	1,092	7,967	13,010	8,549	6,810	100,486
Whitebait	38,391	36,149	16,704	16,218	5,174	5,174	9,864	4,389	692	965	4,726
Whitefish, ocean		596		27,467	45,823	16,807	110	53	365		214,558
Yellowtail	45,230	6,833	26,598	7,406	11,290	924	1,424	15,501	11,470	13,186	910
Miscellaneous fish	62	553	117	960	2,588	286	54		10		2,312
Crustacean:											164,322
Crab	850,044	594,401	155,126	128,226	183,168	277,339	286	3,112		1,686,030	6,119,320
Crab, rock	8,270	6,349	3,049	4,002	4,594	4,112	3,387		5,342	6,710	54,051
Lobster, spiny	145,493	110,476	1,834						217,090	139,726	856,125
Prawn	75	303	147		23	13	133	200	85	61	1,164
Shrimp, bay	22,398	38,985	42,935	76,578	92,586	91,273	113,794	97,289	49,603	11,177	682,731
Shrimp, ocean		30,686		91,523	247,401	216,264	165,222	112,121	6,125		838,656
Mollusk:											
Abalone	184,013	387,236	212,778	509,395	521,148	422,661	384,218	480,068	346,420	407,705	4,185,875
Clam, gaper		516	300	80	220	116			40	100	2,002
Clam, jackknife	1,302	2,487	3,417	4,090	4,929	6,408	6,042	3,134	979	684	36,837
Clam, Washington	613	816	2,255			13			416	448	7,491
Octopus	6,759	3,749	1,474	1,668	1,414	1,234	1,355	518	441	461	26,346
Oyster, eastern	13,261	12,045	13,452	11,400	9,930	8,095	4,228	11,656	14,082	13,676	140,918
Oyster, native	678		165	1,403	4,064	3,586	5,172	1,882	564	385	18,560
Oyster, giant Pacific	155,310	170,466	115,845	44,191	44,184	46,838	49,706	1,682	175,171	197,809	399,060
Squid	20,545	304,180	409,555	1,411,040	908,067	1,013,953	1,445,905	1,505,140	608,775	1,457,480	1,635,067
Miscellaneous mollusk	57	40	3		14	4	33		18		14,271,969
Total pounds	26,213,290	20,795,260	29,750,393	38,472,038	48,193,485	48,853,715	60,526,009	23,863,750	44,545,047	126,269,543	603,117,120

TABLE 16—Continued
Monthly Landings and Shipments Into California During 1955

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Shipments ¹													
Bonito						2,935							2,935
Cabrilla					9,542	2,600	4,202						16,344
Elasmobranch											508		508
Halibut					27	3,053	3,015						10,465
Grouper					3,327								10,460
Halibut, California	2,130		5,003										
Halibut, Pacific	3,070		3,011			3,413		3,045		13,990	14,000		40,529
Mackerel, Pacific								909					909
Salmon	18,735		48,989	36,094	83,744	12,065	56,288	52,928	43,580	32,281	26,722	41,343	452,470
Salmon, California	36,000		72,480	993	83,063	6,907	4,673	59,542	39,386	44,841		6,000	439,053
Sculpin								674					674
Seabass, white				263									263
Shad					6,806	10,647	4,115	6,285					27,853
Sturgeon					1,724	1,865	610	10,493	1,334	1,149		4,490	21,685
Swordfish					140		202	614					1,081
Tuna, albacore	4,488,611	5,364,288	5,887,901	5,715,333	4,156,850	2,104,395	5,099,872	7,232,460	427,269	247,492	1,696,469	2,423,755	44,844,675
Tuna, bigeye		12,186				40,600	316,330	58,635				84,783	512,534
Tuna, bluefin	162,384			180,962									343,346
Tuna, skipjack	1,983,678	1,071,947	3,091,955	1,409,587	1,600,542	2,326,297	2,328,231	1,771,292		1,722,983	239,734	1,087,777	18,634,023
Tuna, yellowfin	2,654,065	1,370,369	3,310,275	3,884,954	4,887,922	6,392,678	4,051,913	5,614,520	1,537,071	696,255	2,750,624	3,375,497	40,326,143
Wahoo					132								132
Miscellaneous fish	17,750	2,195	28,700		30,900			500		18,420	29,900	3,000	131,365
Mollusk:													
Clam, Pismo	54,816	332,160					552,000		640,000				1,578,976
Total pounds	9,421,240	8,238,418	12,448,014	11,231,540	10,865,735	10,907,455	12,421,451	14,811,897	26,888,640	2,777,411	4,757,957	7,026,645	107,896,403
Grand total fishing boat landings and shipments	35,634,830	29,036,678	42,198,407	48,039,126	49,337,773	59,100,940	61,275,166	75,337,906	26,552,390	47,322,458	131,027,500	105,850,649	710,713,523

¹ For origin of shipments refer to Table 14.

TABLE 17
Monthly Landings of the Commercial Fishing Boats in the Eureka Region During 1955

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Fishing boat landings from California waters:													
Flounder	688	1,217	9,953	897	29,334	19,432	39,010	36,257	24,262	5,496	7,845	654	175,045
Hake	22,057	655	17,725	70,359	10,462	43,686	69,307	88,317	44,509	95,737	35,737	22,588	521,148
Halibut, arrowtooth	17,030	5,068	25,384	83,974	23,121	74,923	80,371	139,707	61,594	86,534	42,069	13,042	652,817
Halibut, Pacific					24,344	10,680	9,655	210	6,922	131			51,942
Herring, Pacific	36,137	42,471					619						73,227
Lingcod	3,466	11,954	37,980	22,659	44,110	91,561	85,342	68,811	36,629	34,822	8,013	806	446,153
Mackerel, jack									5	185			190
Perch	2,426	2,075	7,710	8,181			1,458	6,889	5,192	1,827	1,138	604	37,500
Rockfish	143,868	202,637	244,581	136,987	224,721	270,078	335,716	421,801	297,447	315,303	111,627	24,770	2,695,836
Sablefish	52,888	51,653	165,206	155,087	86,065	149,482	115,673	40,909	58,037	72,856	28,816	10,821	987,493
Salmon				6,458	525,382	1,195,003	1,511,490	983,943	550,987				4,773,263
Sanddab	3,562	5,921	7,162	10,618	22,529	29,654	24,425	22,071	11,480	7,354	7,581	2,139	154,496
Shark	35	43	306	40			2,524			60			484
Skate		100		400	3,148		2,529						6,172
Smelt	176	44	547	430	2,140	7,863		7,534	7,584	1,147			29,994
Sole, Dover	23,409	1,861	167,329	663,024	715,305	1,044,516	1,020,507	896,776	645,018	1,062,771	238,162	176,959	6,645,637
Sole, English	41,046	62,152	87,520	66,652	142,764	119,967	120,890	103,571	97,562	121,314	80,832	31,432	1,075,702
Sole, petrale	243,598	24,478	42,339	42,849	49,137	131,543	146,417	145,136	151,136	201,238	84,547	62,978	1,325,366
Sole, rex	21,456	11,138	36,017	38,421	43,433	55,770	50,403	47,067	40,897	56,132	27,811	11,042	439,587
Sole, sand		405	1,000	144							990		2,539
Sole, unclassified		46	3,429					70					3,545
Tuna, albacore									10,426	12,232	34,710		57,398
Turbot	720	781	556	25	1,172			4,798	12		669	517	4,452
Whitebait	2,661	6,009	9,891	14,604	24,274	23,087	10,085						95,409
Miscellaneous fish						9	50	15					71
Crustacean:													
Crab	418,883	410,694	321,055	114,483	87,694	79,594	29,152					78,473	1,540,028
Shrimp, ocean					35,066	97,732	130,798	124,591	112,121	6,125			506,433
Mollusk:													
Clam, Washington	613	777	2,653	2,250			235			221	416	448	7,378
Octopus												20	255
Miscellaneous mollusk				3									3
Total pounds	1,034,719	842,179	1,158,343	1,437,845	2,094,201	3,444,580	3,786,656	3,138,473	2,161,820	2,081,494	700,963	437,293	22,318,566

TABLE 17—Continued
Monthly Landings of the Commercial Fishing Boats in the Eureka Region During 1955

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Fishing boat landings from waters north of the state boundary:													
Flounder.....			484	112	296	7,939	2,298	11,955	42	690	2,257		3,232
Hake.....			7,930	3,100		13,215	8,365	12,576	31,102				73,538
Halibut, arrowtooth.....			5,956	4,784		2,913	2,913	2,913	13,278				64,126
Lingcod.....			130	441	4,742	9,164	2,893	2,893	9,096	1,500	108		30,726
Rockfish.....			27,494	3,950	20,679	91,894	13,313	33,123	70,842	1,822	884		269,001
Sablefish.....			10,568	13,097	6,631	12,128	2,625	2,712	7,118	668	78		55,625
Salmon.....							9,634	13,504	14,940				38,378
Sanddab.....			108					102	1,200	978			2,688
Sole, Dover.....			135,907	184,719	121,786	273,083	70,147	66,889	104,813	10,048	5,220		981,412
Sole, English.....			3,098	770	4,726	2,121	2,042	1,414	4,708	2,870	1,354		23,103
Sole, petrale.....			1,898	1,059	49,147	89,781	18,860	29,730	73,586	13,837	616		278,523
Sole, rex.....			1,165	710	2,896	7,110	1,453	1,355	7,314	1,600			23,603
Sole, sand.....			138							700	982		1,620
Turbot.....			216	289									505
Crustacean:													
Crab.....					1,582	3,854							5,436
Shrimp, ocean.....					100								100
Total pounds.....			195,068	213,169	212,585	512,289	158,273	176,355	337,979	34,713	10,517		1,850,978
Grand totals, Eureka region.....	1,034,719	842,179	1,353,441	1,651,014	2,306,786	3,966,869	3,941,929	3,314,828	2,499,799	2,116,207	711,480	437,293	24,169,544

TABLE 18
Monthly Landings of the Commercial Fishing Boats in the Sacramento Region During 1955

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Fishing boat landings from California waters:													
Carp.....	48,985	43,639	46,285	75,891	82,587	38,011	31,967	25,008	70,118	92,325	62,833	116,421	734,070
Hardhead.....	5,814	6,642	13,938	2,930	5,879	64	50		54	3,786	11,248	14,031	64,436
Salmon.....	3,974	903	891	9,148	19,609	4,825		182,896	2,093,514		2,012	2,974	2,320,746
Shad.....			13,292	113,396	351,020	746							478,454
Spittail.....	831	681	22	56									1,590
Squawfish.....		7		25	82								114
Miscellaneous fish.....												56	56
Total pounds, Sacramento region.....	59,604	51,872	74,428	201,446	459,177	43,646	32,017	207,904	2,163,686	96,111	76,083	133,482	3,599,466

TABLE 19
Monthly Landings and Shipments of Commercial Fish Into the San Francisco Region During 1955

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Fishing boat landings from California waters:													
Anchovy	367	392			41,835	25,830		23,510	85,715	18,500	11,260		206,650
Cabezon		220	66	52	284	108	41	1,072	6,137	72	32		8,114
Croaker, white (kingfish)		82,550	52,851	14,703	44,097	7,820	1,870	68,340	39,632	24,682	10,774	2,685	360,987
Flounder	10,113				1,385		755	30,195	3,670	3,840	1,400		41,245
Hake													
Halibut, arrowtooth	1,770	520	605	475	225	4,041	9,205	7,652	886	820	2,700	2,517	31,306
Halibut, California	20,609	12,708	713	1,100	464	1,577	1,254	665	729	1,150	405	320	41,754
Herring, Pacific	558,806	482,140	83,807	53,745	600							22,154	1,147,567
Lingcod	7,404	16,551	35,059		25,510	45,547	36,751	43,114	23,703	28,938	10,066	9,080	335,568
Mackerel, jack										175			175
Perch	1,125	1,570	14,713	12,665		810	1,704	1,253	1,231	1,082	639	754	37,646
Pompano, California					8	140							148
Rockfish	171,308	164,009	141,941	60,980	22,758	65,230	48,820	53,206	151,860	257,111	217,897	206,584	1,562,607
Sablefish	16,792	18,570	30,078	11,070	13,685	7,782	13,985	60,400	42,755	27,454	51,170	52,336	346,047
Salmon					362,482	1,293,731	892,445	995,002	392,368				3,936,028
Sanddab	44,444	44,251	58,105	31,801	23,215	27,429	9,653	56,380	40,514	33,191	42,087	24,232	435,302
Sculpin, slaghorn	60					140			125	305	403		1,201
Seabass, white	50	36						26	532	705			1,329
Shark	15,355	13,578	3,831	361	19	1,322	949	5,419	8,920	5,229	3,100	2,077	60,173
Skate	15,354	20,420	20,281	8,455	14,710	4,110	1,700	11,490	7,108	8,505	5,725	4,065	122,293
Smelt	9,143	97,492	148,032	66,616	95,804	24,875	13,505	24,758	24,706	5,522	4,500	5,753	447,706
Sole, Dover	8,696	63,186	174,351	21,955	21,266	35,402	26,500	47,449	54,075	37,568	43,754	16,368	550,533
Sole, English	241,966	242,400	208,047	178,467	214,437	111,345	111,345	296,703	331,572	143,948	124,821	124,821	2,330,860
Sole, petrale	113,654	79,049	100,269	106,347	144,013	118,294	58,079	237,380	377,235	171,572	412,017	139,967	1,581,864
Sole, rex	55,116	57,037	74,896	52,281	21,413	30,058	19,915	27,682	34,296	38,172	65,596	47,179	523,641
Sole, sand	7,168	13,543	3,193	2,771	8,206	1,269	65	21,282	16,106	4,964	2,773	1,523	82,864
Sole, unclassified		81		170									900
Tomcod				97				455	1,878	108	50		2,869
Tuna, albacore									7,721	1,929,631	61,884		2,471,111
Turbot	8,943	15,527	5,817	2,744	9,038	875	605	7,460	12,808	8,441	6,781	4,410	83,639
Whitebait	3,146	4,449	30	1,806	2,053	6,632	3,778	1,168	394		965	4,708	29,159

Crustacean:													
Crab.....	424,163	163,923	88,360	20,677	27,626	90,623	247,535	286	97,289	49,603	1,683,012	1,720,358	4,466,563
Shrimp, bay.....	22,398	30,686	38,985	42,935	76,578	92,586	91,273	113,794	11,177	15,427	15,427	15,427	682,731
Shrimp, ocean.....	-----	-----	-----	-----	55,165	149,479	85,406	40,631	-----	-----	-----	-----	330,681
Abalone.....	-----	-----	-----	705	770	1,615	3,125	6,239	6,275	3,285	1,075	575	23,664
Mollusk:													
Clam, Washington.....	-----	39	40	5	-----	-----	13	-----	-----	16	-----	-----	113
Octopus.....	2,966	1,851	2,170	759	760	1,140	493	785	192	10	-----	568	11,694
Oyster, eastern.....	13,261	12,045	14,855	13,452	11,400	9,930	8,095	4,228	11,656	14,082	13,676	14,238	140,918
Oyster, native.....	678	-----	77	165	1,403	4,084	3,586	5,172	1,682	564	764	385	18,560
Oyster, giant Pacific.....	15,310	24,216	18,017	21,595	15,691	11,384	10,048	8,506	12,960	16,371	13,109	12,255	179,462
Squid.....	-----	-----	20	-----	2,500	-----	-----	-----	-----	-----	-----	-----	2,500
Miscellaneous mollusk.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	20
Total pounds.....	1,790,175	1,664,670	1,319,589	732,658	1,090,400	2,167,382	1,693,063	2,206,677	1,950,868	2,772,395	2,822,739	2,428,345	22,638,951
Fishing boat landings from waters south of the International Boundary:													
Tuna, albacore.....	-----	-----	-----	-----	-----	-----	-----	-----	244,491	192,468	-----	-----	611
Tuna, bluefin.....	-----	-----	-----	-----	-----	-----	-----	-----	48,509	20,320	-----	-----	436,959
Tuna, skipjack.....	-----	-----	-----	-----	-----	-----	-----	-----	121,487	11,684	-----	-----	68,829
Tuna, yellowfin.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	133,171
Total pounds.....	-----	-----	-----	-----	-----	-----	-----	-----	414,487	225,083	-----	-----	639,570
Shipments: ¹													
Halibut, Pacific.....	3,070	-----	3,011	-----	-----	3,413	-----	3,045	-----	13,990	14,000	-----	40,529
Sablefish.....	18,736	-----	13,689	36,094	43,421	11,795	29,288	-----	21,030	22,061	15,022	10,553	221,689
Salmon.....	-----	37,212	3,184	651	5,393	-----	4,115	15,016	-----	14,200	-----	6,000	81,656
Shad.....	-----	-----	-----	642,115	6,806	10,647	4,115	6,285	-----	-----	288,988	-----	27,853
Tuna, albacore.....	562,112	387,009	-----	-----	459,939	249,247	500,410	1,073,984	-----	150,133	-----	474,054	4,787,991
Tuna, bigeye.....	-----	12,186	-----	-----	-----	-----	100,277	-----	-----	-----	-----	-----	112,463
Tuna, skipjack.....	-----	337,648	87,941	-----	711,150	-----	-----	-----	-----	-----	-----	-----	1,136,739
Tuna, yellowfin.....	768,679	270,224	185,763	612,469	661,383	1,165,590	295,130	545,606	629,553	541,822	943,445	941,049	7,560,713
Miscellaneous fish.....	5,000	2,040	-----	-----	3,150	-----	-----	-----	-----	-----	3,900	3,000	17,090
Total pounds.....	1,357,597	1,046,319	293,588	1,291,329	1,891,242	1,440,692	929,220	1,643,936	650,563	712,206	1,265,355	1,434,656	13,986,723
Grand totals, San Francisco region.....	3,147,772	2,710,989	1,613,177	2,023,987	2,981,642	3,608,074	2,622,283	3,850,613	3,015,928	3,739,684	4,088,094	3,863,001	37,265,214

¹ See Table 14 for origin of shipments.

Crustacean:	390	854	1,914	2,460	1,439	555	652	133	200	792	405	9,461
Crab.....	75	303	147			23	13			61	124	1,164
Mollusk:												
Clam, gaper.....	150	440	516	300	80	220	116			100	40	2,002
Octopus.....	3,149	1,626	2,830	289	94	155		296	221	461	756	10,203
Squid.....		302,400	391,680	4,985,073	1,400,035	934,127	950,803	1,443,895	1,505,140	1,457,480	138,605	14,118,013
Miscellaneous mollusk.....	37	40								18		95
Total pounds.....	588,888	1,312,627	1,972,462	6,568,185	3,660,345	2,641,638	2,710,147	3,081,801	3,614,717	2,680,239	700,993	32,693,986
Fishing boat landings from south of the International Boundary:												
Tuna, albacore.....												72,500
Tuna, bluefin.....												183,619
Tuna, skipjack.....											181,301	361,301
Tuna, yellowfin.....						204,607					284,750	827,985
Total pounds.....						204,607					466,051	1,445,405
Shipments: ¹												
Tuna, skipjack.....						61,852	296,871	17,768				376,491
Tuna, yellowfin.....						89,448	50,666	86,025				226,139
Total pounds.....						151,300	347,537	103,793				602,630
Grand totals, Monterey region.....	588,888	1,312,627	1,972,462	6,568,185	3,660,345	2,997,545	3,057,684	3,185,594	3,614,717	2,680,239	1,167,044	34,742,021

¹ See Table 14 for origin of shipments.

TABLE 21
Monthly Landings and Shipments of Commercial Fish Into the Santa Barbara Region During 1955

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Fishing boat landings from California waters:													
Anchovy.....	1,280,090	92,600	154,440	197,460	616,230	177,600	121,900	407,740	71,400	56,440	49,760	36,000	3,261,660
Barbauda, California.....	86	585	2,920		226	543	293	29	29	223	72		3,391
Cabezon.....	31	96	133	21	3,679	1,071	3,378	4,261	8,443	7,611	3,175	629	61,251
Croaker, white (kingfish)		7,759	540									263	2,075
Flounder.....	1,272												
Hallibut, California.....	24,023	17,270	13,284	9,958	16,128	7,392	6,321	7,668	4,980	3,415	7,813	18,985	136,327
Langcod.....	3,229	3,008	2,611	4,897	7,454	6,228	1,514	4,023	3,418	7,012	2,578	699	37,721
Mackerel, jack.....					2,005	1,592	592	64,375	297,783	1,175,175	3,253,755	5,015,825	9,809,510
Mackerel, Pacific.....					1,923	2,140	2,140	1,239	755,170	163,798	45,725	133,806	1,193,845
Perch.....	2,423	3,077	8,797	256		4,409	3,343	3,343	3,104	1,917	823	1,448	29,397
Pompano, California.....							12	736	1,059	457	15		2,270
Rockfish.....	257,574	372,999	405,574	394,639	442,180	301,581	142,868	239,996	161,357	228,601	227,219	205,315	3,378,233
Sablefish.....	2,069	4,640	812	2,200	5,801	8,693	6,917	9,418	205	2,351	6,080	3,311	49,437
Salmon.....					102,109	143,178	29,514	21,311	5,017	136	40		301,305
Sanddab.....	1,907	1,168	3,101	224	901	102	6,736	2,881	1,335	140	135	494	18,824
Sardine.....	50,800					87,000	148,955	212,400	366,800	26,232,780	9,860,910	2,772,260	39,731,905
Sea bass, black.....		93			96								189
Seabass, white.....	99	142	95	622	904	1,125	16,300	22,365	25,888	19,914	4,838	154	92,446
Seatront, greenling.....	183		61				193	123	59	87	36		782
Shark.....	2,527	10,665	30,393	9,444	20,334	12,322	2,005	8,571	36,103	2,843	2,807	1,870	139,881
Sheep-head.....	494	879	262			56					48	10	1,749
Skate.....	2,121	396	230	343	217	77						458	3,765
Smelt.....			70				3,559	2,922	2,557	161	545		3,765
Sole, Dover.....					505	219	745	280				4	10,035
Sole, English.....	7,620	13,550	7,935	3,965	7,030	3,984	11,509	16,200	10,030	22,456	3,495	8,881	116,655
Sole, petrale.....	28,795	23,335	36,402	21,731	29,496	31,182	23,660	7,421	9,374	18,523	63,705	12,163	305,757
Sole, rex.....	15,042	11,653	12,156	5,453	1,671	659	835	727	675	3,102	2,047	1,281	55,301
Sole, sand.....	2,840	302	400				22						6187
Sole, unclassified.....		1,029	1,478	379	93	271	13	101	71	41	38		3,514
Swordfish.....													1,869
Tuna, albacore.....													18,003
Tuna, albacore.....													16,003
Turbot.....	5,102	3,145	120	46				10,223	45,444	48,980	11,304	52	10,280
Miscellaneous fish.....	25	353			28			7		10		1,883	469

TABLE 22
Monthly Landings and Shipments of Commercial Fish Into the Los Angeles Region During 1955

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Fishing boat landings from California waters:													
Anchovy.....	4,036,679	4,187,800	6,084,983	4,727,313	5,758,660	1,794,650	1,963,758	2,052,711	480,365	348,855	1,173,676	1,723,885	34,333,355
Baracuca, California.....	126	126	1,241	1,241	32,450	59,118	45,775	526	15	266	213	266	139,502
Bonito.....	32,090	830	550	550	344	1,505	399	11	15	60	24	24	35,897
Carp.....	104	104	104	104	344	104	104	104	104	104	104	104	1,448
Croaker, white (kingfish).....	9,445	3,365	48,153	15,126	174,898	38,130	13,282	11,127	27,311	13,425	26,950	22,477	403,669
Flyingfish.....	110	110	110	110	4,663	10,809	3,874	688	2,531	1,831	1,831	1,831	22,565
Hake.....	1,100	3,399	3,891	620	2,412	2,775	1,477	1,379	2,982	6,819	1,831	5,335	34,050
Halibut, California.....	5,833	12,750	19,257	17,233	7,128	6,029	10,654	2,624	2,050	1,095	85	105	84,933
Lingcod.....	14	14	240	18	18	40	40	40	40	5	47	45	395
Mackerel, jack.....	104,594	1,294,171	1,024,073	1,157,081	471,378	247,032	8,177,311	3,048,465	306,350	260,813	3,949,165	4,845,442	25,785,875
Mackerel, Pacific.....	75,238	1,037,551	2,017,424	159,999	1,152,559	1,526,151	2,899,452	3,596,642	935,118	2,197,955	2,673,742	3,795,690	22,038,521
Opaleye.....	228	233	471	3,085	1,205	859	118	501	648	980	827	518	6,117
Pompano, California.....	73	577	3,941	3,941	620	1,425	418	234	1,426	2,234	2,508	1,201	18,009
Rockfish.....	46,474	48,812	55,556	21,887	65,651	34,703	34,517	28,855	24,538	33,065	20,042	21,781	438,881
Sablefish.....	14	14	630	3,078	2,009	257	1,046	225	234	234	103	70	7,666
Salmon.....	983	1,489	203	203	203	347	535	1,902	1,570	3,052	636	1,063	1,085
Sanddab.....	1,000,812	93,400	5,026	4,842	4,558	2,717	81,100	199,392	257,925	448,340	64,284,189	38,069,902	29,488
Sardine.....	1,000,812	93,400	122,435	64,842	171,943	114,904	81,100	199,392	257,925	448,340	64,284,189	38,069,902	104,938,684
Sargo, California.....	5,638	660	2,161	889	3,744	19,279	20,718	15,609	4,669	1,178	2,922	1,868	79,335
Sculpin.....	34	34	34	66	244	653	2,179	119	777	464	464	464	4,612
Sea bass, black.....	1,538	7,844	17,127	7,566	41,886	55,162	20,508	17,122	70,561	14,382	614	2,590	256,900
Seabass, white.....	3,786	2,967	4,518	4,543	6,448	11,740	14,112	10,158	6,866	6,362	2,127	3,078	76,705
Shark.....	485	1,869	664	61	61	22	225	112	76	87	6	80	3,687
Sheep-head.....	181	1,618	1,049	138	310	35	44	55	80	8	8	10	3,528
Skate.....	1,530	265	6,706	8,790	640	2,595	530	2,627	2,886	1,847	6,283	2,346	37,045
Sole, Unclassified.....	57	727	158	19	663	179	30	54	25,983	20	4,919	2,346	1,907
Swordfish.....	1,377	1,377	1,377	1,377	1,377	1,377	1,377	1,377	1,377	1,377	1,377	1,377	66,602
Tuna, albacore.....	193,869	193,869	193,869	193,869	193,869	193,869	193,869	193,869	193,869	193,869	193,869	193,869	3,420,705
Tuna, Bluefin.....	193,869	193,869	193,869	193,869	193,869	193,869	193,869	193,869	193,869	193,869	193,869	193,869	1,917,129
Tuna, skipjack.....	193,869	193,869	193,869	193,869	193,869	193,869	193,869	193,869	193,869	193,869	193,869	193,869	635
Whitefish, ocean.....	46	46	46	46	188	78	32	32	32	220	635	290	854

TABLE 22—Continued
Monthly Landings and Shipments of Commercial Fish Into the Los Angeles Region During 1955

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Shipments: ¹													
Bonito					9,542	2,935	3,220						2,935
Cabrilla					4,370	2,600							15,362
Eel					40,323	3,053	2,121				508		9,544
Grouper			35,000			270							230,781
Sablefish								52,928	22,550	10,220	11,700	30,790	
Salmon	36,000	47,956	69,296	342	77,670	6,907	4,673	44,526	39,386	30,641			357,397
Sturgeon					1,724	1,885	910	10,493	1,354	1,149		4,490	21,065
Swordfish		125			140		202						1,081
Tuna, albacore	3,271,678	4,763,014	5,887,901	5,073,218	3,694,035	1,855,148	4,597,349	6,158,476	426,189	97,359	1,407,481	1,949,701	39,181,949
Tuna, bigeye						40,600	216,053	50,105				84,783	397,641
Tuna, bluefin	162,384			180,062									343,246
Tuna, skipjack	1,319,323	734,299	2,430,454	623,210	673,980	805,963	689,018	1,640,135			239,724	1,087,777	10,333,863
Tuna, yellowfin	1,548,132	1,057,876	2,304,788	2,162,438	3,718,135	4,388,909	3,143,466	4,067,533	728,918		455,657	2,294,148	26,470,000
Wahoo					132								132
Miscellaneous fish	12,750	155	28,700		27,750			500		18,420	26,000		114,215
Mollusk:													
Clam, Pismo	54,816	332,160					552,000		640,000				1,578,976
Total pounds	6,405,083	6,935,585	10,756,139	8,040,170	8,247,801	7,198,250	9,235,712	12,631,310	1,858,377	157,789	2,141,080	5,451,689	79,058,985
Grand totals, Los Angeles region	20,147,697	22,627,513	33,224,317	31,528,139	31,876,745	34,027,998	35,236,667	47,290,585	6,847,115	4,465,103	93,200,929	74,336,107	434,808,915

¹ See Table 14 for origin of shipments.

TABLE 23
Monthly Landings and Shipments of Commercial Fish Into the San Diego Region During 1955

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Fishing boat landings from California waters:													
Anchovy, California				1,223	126,475	50,896	460	530	155	6,182			6,382
Baracuda, California					2,975			97		1,788	497		179,738
Bonito, California		190	278	10	87	640		1,586	4,849	185	237	716	4,657
Croaker, white (kingfish)	932	7,947	12,651	8,464	2,605	1,345	201	482	4,602	4,587	4,815	9,341	10,496
Halibut, California	12,613												69,063
Lingcod				36	4,020		150	25,597		87	15		138
Mackerel, jack					2,555	13,192	980	56,092	10,332	15,976	17,009	11,713	29,767
Mackerel, Pacific	21,766	11,024	5,538	252	2,555	27,860	4,213	3,456	639	2,301	2,871	3,127	167,009
Rockfish	332	3,337	13,877	24,673	20,107	27,860				145			106,816
Sablefish			33	251		10							439
Salmon							468						468
Sculpin	761	2,976	6,875	1,300	1,251	5,601	505	4,378	1,300	204	55	633	25,830
Sea bass, black	97	363	125		120	335		1,290	454	38	73	89	2,989
Seabass, white	2,530	15,531	16,976	720	61,313	37,759	2,479	3,113	29,691	11,040	4,811	1,660	187,637
Shark	12,449	2,818	13,846	14,371	25,514	8,769	2,342	5,123	6,112	15,156	22,613	24,514	153,627
Sheep-head	1,215	202	189			121				641	1,532	1,629	5,530
Skate	59										85		144
Sole, petrale				112		400		143	112	337	28		3,334
Sole, unclassified			6	61	182	2,374	252	12,584	23,824	7,074	461		44,195
Swordfish													
Tuna, albacore						7,026	456,663	464,382	47,435	128,164	63,351		1,167,001
Tuna, bluefin					46,751	322,183	172,700	18,972					560,806
Tuna, skipjack						601							601
Whitefish, ocean								110	53				413
Yellowtail		42		83	2,326	976	63	344	19	45	200		3,008
Miscellaneous fish	37				545	148	5						735
Crustacean:													
Crab, rock	2,536	1,538	552						192	2,292	1,108	2,862	11,080
Lobster, spiny	13,957	15,285	13,922							82,709	43,454	22,695	192,022
Mollusk:													
Abalone	18,218		40,530	30,089	40,589	72,965	45,243	81,410	65,018	30,396	31,293	52,038	597,789
Clam, jackknife	1,302	1,399	2,487	3,417	4,090	4,929	6,408	0,042	3,134	1,966	379	654	36,837
Miscellaneous mollusk								33					33
Total pounds	88,824	62,661	127,885	85,072	341,692	555,380	693,413	686,586	197,921	311,271	195,316	131,857	3,480,878

TABLE 23—Continued
Monthly Landings and Shipments of Commercial Fish Into the San Diego Region During 1955

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Fishing boat landings from waters south of the International Boundary:													
Barracuda, California	10,595	4,675	1,468		1,840	40		1,113	1,232	10,510	21,380	32,229	85,082
Bonito	7,107									245	2,200	9,972	19,524
Cabrilla		2,545											2,545
Grouper		5,046			216		580						5,842
Halibut, California		699	4,967			4,035	15,069	3,023	11,276	9,553	11,181	1,596	61,399
Mackerel, Pacific		180											180
Rockfish	995	222	4,471			177	132		93			645	6,735
Sculpin							2,693						2,693
Sea bass, black		1,499	1,292				1,799	180	1,865	1,866	3,276	4,596	16,373
Seabass, white	2,135	1,503	4,556			18	520	18,491	13,070	17,159	28,958	8,281	94,691
Shark	740	320	1,765				20	1,513	1,200	1,315	3,404	2,460	12,737
Sheep-head			440					720		86			1,246
Swordfish							2,278	305	330	7,199			10,112
Tuna, albacore						5,070	5,949,806	4,580,530	2,655,245	551,100	1,530,822	951,282	16,223,855
Tuna, bluefin						120,349	10,589	186,568		64	45,360		362,930
Tuna, skipjack	4,821,565	314,579	975,274	2,480,394	2,006,638	2,781,773	2,501,623	4,260,139	1,397,451	873,794	6,100,803	7,403,809	36,017,342
Tuna, yellowfin	2,099,082	65,739	441,218	747,051	3,448,269	7,809,180	4,539,092	5,967,270	1,717,091	915,508	6,941,957	8,356,520	43,047,977
Walrus					4,309		5,174						9,483
Whitefish, ocean			180							145		420	1,045
Yellowtail	42,834	1,559	1,625	15	3,987	9,332		58	693	5,967	4,919	7,545	78,534
Crustacean:													
Lobster, spiny										79	30		109
Total pounds	6,985,053	398,566	1,437,556	3,227,400	5,555,259	10,729,974	13,028,375	15,028,910	5,800,046	23,941,590	14,694,290	16,779,355	96,060,434
Shipments: ¹													
Cabrilla							982						982
Grouper				27			894						921
Halibut, California	2,130		5,003	3,327									10,460
Mackerel, Pacific								909					909
Sculpin								674					674
Seabass, white				263									263
Tuna, albacore	654,821	214,245			2,876		2,113		1,080				875,135
Tuna, skipjack	664,355		573,560	786,377	215,412	1,368,482	1,342,342	113,389		1,722,983			6,786,900
Tuna, yellowfin	242,518		570,599	894,129	264,112	436,902	447,012	34,391			1,051,374		3,431,037
Total pounds	1,563,824	214,245	1,149,162	1,684,123	472,400	1,805,384	1,793,343	149,363	1,080	1,722,983	1,051,374		11,607,281
Grand totals, San Diego region	8,637,701	675,472	2,714,603	4,996,655	6,369,351	13,093,738	15,516,131	15,864,859	5,999,047	4,428,844	15,940,980	16,911,212	111,148,593

¹ See Table 14 for origin of shipments.

TABLE 24

The Value, by Region, of the Annual Landings and Shipments of Commercial Fish
Into California During 1955

Species	Eureka region		Sacramento region		San Francisco region		Monterey region	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Fishing boat landings:								
Anchovy					206,650	\$7,357	6,883,535	\$90,174
Barracuda, California								
Bonito								
Cabezon					759	19	4,578	150
Cabrilla								
Carp			734,070	\$44,045				
Croaker, white (kingfish)					8,114	797	335,367	20,957
Flounder	178,277	\$7,505			360,987	14,693	108,841	6,454
Flyingfish								
Grouper								
Hake	594,686	9,991			41,245	425	319,704	2,942
Halibut								
Halibut, arrowtooth	716,943	14,124			31,306	860		
Halibut, California					41,754	8,559	31,147	6,467
Halibut, Pacific	51,942	10,019						
Hardhead			64,436	27,707				
Herring, Pacific	79,227	2,060			1,147,587	27,886	719,727	19,740
Lingcod	476,879	33,382			335,568	23,423	104,275	10,271
Mackerel, jack	190	20			175	7	129,190	7,623
Mackerel, Pacific							330	33
Opaleye								
Perch	37,500	5,042			37,646	5,535	31,811	3,335
Pompano, California					148	56	58,858	14,337
Ratfish							18,533	222
Rock bass								
Rockfish	2,967,837	91,691			1,562,607	58,755	4,160,038	182,317
Sablefish	1,043,118	95,863			346,047	10,589	615,980	20,882
Salmon	4,811,641	1,681,535	2,320,746	600,841	3,936,028	1,348,893	606,469	216,667
Sanddab	157,184	8,299			435,302	19,414	140,729	8,965
Sardine							937,160	22,398
Sargo, California								
Sculpin								
Sculpin, staghorn					1,201	60		
Sea bass, black								
Seabass, white					1,329	437	6,641	1,686
Seatrout, greenling								
Shad			478,454	29,282				
Shark	484	28			60,173	3,170	116,095	6,594
Sheep-head								
Sierra								
Skate	6,172	74			122,293	1,590	16,720	182
Smelt	29,994	2,310			447,706	24,418	255,392	14,835
Sole, Dover	7,627,049	376,013			550,533	19,214	6,170	139
Sole, English	1,098,805	64,611			2,330,860	124,235	588,459	41,663
Sole, petrale	1,603,919	136,333			1,581,864	142,938	127,421	12,806
Sole, rex	463,190	25,522			523,641	23,302	52,305	2,595
Sole, sand	3,521	269			82,864	7,135		
Sole, unclassified	3,545	191			900	90	6,052	488
Splittail			1,590	490				
Squawfish			114	5				
Swordfish								
Tomcod					2,869	96		
Tuna, albacore	57,368	8,823			2,471,722	351,479	2,152,341	315,318
Tuna, bluefin					436,959	57,504	183,619	22,640
Tuna, skipjack					68,829	8,211	361,301	45,632
Tuna, yellowfin					133,171	19,976	827,985	119,064
Turbot	4,957	299			83,639	3,488	1,640	68
Wahoo								
Whitebait	95,409	8,492			29,159	3,246	89,990	5,913
Whitefish, ocean								
Yellowtail								
Miscellaneous fish	74	4	56	6			50	1

TABLE 24—Continued

The Value, by Region, of the Annual Landings and Shipments of Commercial Fish
Into California During 1955

Species	Santa Barbara region		Los Angeles region		San Diego region		Total	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Fishing boat landings:								
Anchovy	3,261,660	\$59,362	34,333,355	\$439,467	6,382	\$224	44,691,582	\$596,584
Barracuda, California	3,591	901	872,548	140,219	264,820	36,420	1,140,959	177,540
Bonito			112,809	6,690	24,181	1,318	136,990	8,008
Cabezon	1,607	80					6,944	249
Cabrilla			98,224	14,615	2,545	305	100,769	14,920
Carp			448	27			734,518	44,072
Croaker, white (kingfish)	61,251	3,503	404,160	16,431	10,596	1,069	819,488	42,757
Flounder	2,075	133					650,180	28,785
Flyingfish			22,565	1,869			22,565	1,869
Grouper			239,678	46,665	5,842	929	245,520	47,594
Hake			910	16			956,545	13,374
Halfmoon			34,410	8,410			34,410	8,410
Halibut, arrowtooth							748,249	14,984
Halibut, California	136,337	32,313	169,502	35,375	131,062	26,772	509,802	109,486
Halibut, Pacific							51,942	10,019
Hardhead							64,436	27,707
Herring, Pacific							1,946,521	49,686
Lingcod	47,671	4,352	395	49	138	17	964,926	71,494
Mackerel, jack	9,809,510	151,066	25,785,875	551,817	29,767	1,191	35,754,707	711,724
Mackerel, Pacific	1,103,845	17,331	22,038,638	506,888	167,489	7,336	23,310,302	531,588
Opaleye			6,117	920			6,117	920
Perch	29,597	3,444					136,554	17,356
Pompano, California	2,279	550	18,019	4,959			79,304	19,902
Ratfish							18,533	222
Rock bass			5,862	928			5,862	928
Rockfish	3,378,233	120,611	499,431	51,588	113,551	8,889	12,681,697	513,851
Sablefish	52,487	2,288	7,666	449	439	56	2,065,737	130,127
Salmon	301,305	105,057	1,085	468	468	214	11,977,742	3,953,675
Sanddab	18,824	954	29,488	5,358			781,527	42,990
Sardine	39,731,905	675,442	104,938,684	2,371,613			145,607,749	3,069,453
Sargo, California			695	139			695	139
Sculpin			79,493	18,284	28,532	5,712	108,025	23,996
Sculpin, staghorn							1,201	60
Sea bass, black	189	28	346,063	51,356	19,235	2,629	365,487	54,013
Seabass, white	92,446	20,200	532,121	126,020	282,328	69,919	914,865	218,262
SeatROUT, greenling	752	38					752	38
Shad							478,454	29,282
Shark	139,884	9,159	93,201	11,930	166,364	17,211	576,201	48,092
Sheep-head	1,749	174	4,627	281	6,776	504	13,152	959
Sierra			4,240	549			4,240	549
Skate	3,765	229	3,528	328	144	14	152,622	2,417
Smelt	10,035	478	37,045	1,520			780,172	43,561
Sole, Dover	1,749	86					8,185,501	395,452
Sole, English	116,655	9,088					4,134,779	239,597
Sole, petrale	305,787	29,172			512	61	3,619,503	321,310
Sole, rex	55,301	2,920					1,094,437	54,339
Sole, sand	6,187	560					92,572	7,964
Sole, unclassified	3,514	240	1,907	187	3,534	411	19,452	1,607
Splittail							1,590	490
Squawfish							114	5
Swordfish	1,850	775	78,502	34,157	54,307	23,395	134,659	58,327
Tomcod							2,869	96
Tuna, albacore	119,272	18,046	6,810,739	1,127,857	17,390,856	2,878,189	29,002,298	4,699,712
Tuna, bluefin			12,065,063	1,727,716	923,536	132,897	13,609,177	1,940,757
Tuna, skipjack			65,442,883	8,821,712	36,017,943	4,819,201	101,890,956	13,694,756
Tuna, yellowfin			78,282,731	12,024,228	43,047,977	6,582,036	122,291,864	18,745,304
Turbot	10,250	525					100,486	4,380
Wahoo			13,379	4,403	9,483	3,319	22,862	7,722
Whitebait							214,558	17,651
Whitefish, ocean			854	62	1,468	136	2,312	198
Yellowtail			81,880	7,295	82,442	6,166	164,322	13,461
Miscellaneous fish	469	26	3,102	334	735	140	4,486	511

TABLE 24—Continued

The Value, by Region, of the Annual Landings and Shipments of Commercial Fish
Into California During 1955

Species	Eureka region		Sacramento region		San Francisco region		Monterey region	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Crustacean:								
Crab	1,545,464	\$274,009			4,466,563	\$681,151	9,461	\$1,872
Crab, rock								
Lobster, spiny							1,164	466
Prawn								
Shrimp, bay					682,731	\$50,913		
Shrimp, ocean	506,533	48,324			330,681	23,276		
Mollusk:								
Abalone					23,664	3,313		
Clam, gaper							2,002	185
Clam, jackknife								
Clam, Washington	7,378	853			113	34		
Octopus	255	14			11,694	427	10,203	1,021
Oyster, eastern					140,918	36,188		
Oyster, native					18,560	3,007		
Oyster, giant Pacific					179,462	19,920		
Squid					2,500	75	14,118,013	230,123
Miscellaneous mollusk	3				20	2	95	28
Total pounds and value	24,169,544	\$2,905,700	3,599,466	\$702,376	23,278,521	\$3,136,163	34,139,391	\$1,457,253
Shipments: ¹								
Bonito								
Cabrilla								
Eel								
Grouper								
Halibut, California								
Halibut, Pacific					40,529	8,106		
Mackerel, Pacific								
Sablefish					221,689	38,174		
Salmon					81,656	24,930		
Sculpin								
Seabass, white								
Shad					27,853	29,246		
Sturgeon								
Swordfish								
Tuna, albacore					4,787,991	798,158		
Tuna, bigeye					112,463	12,405		
Tuna, bluefin								
Tuna, skipjack					1,136,739	139,705	376,491	46,271
Tuna, yellowfin					7,560,713	1,069,841	226,139	31,099
Wahoo								
Miscellaneous fish					17,090	3,994		
Mollusk:								
Clam, Pismo								
Total pounds and value					13,986,723	\$2,124,559	602,630	\$78,270
Grand totals	24,169,544	\$2,905,700	3,599,466	\$702,376	37,265,244	\$5,260,722	34,742,021	\$1,535,523

¹ See Table 14 for origin of shipments.

TABLE 24—Continued

The Value, by Region, of the Annual Landings and Shipments of Commercial Fish
Into California During 1955

Species	Santa Barbara region		Los Angeles region		San Diego region		Total	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Crustacean:								
Crab	97,832	\$19,273					6,119,320	\$976,305
Crab, rock	9,043	223	33,928	\$3,359	11,080	\$284	54,051	3,866
Lobster, spiny	200,914	93,263	466,080	237,281	192,131	103,175	859,125	433,719
Prawn							1,164	466
Shrimp, bay							682,731	50,913
Shrimp, ocean	1,442	144					838,656	71,744
Mollusk:								
Abalone	2,044,046	260,168	1,610,376	119,635	507,789	40,137	4,185,875	423,253
Clam, gaper							2,002	185
Clam, jackknife					36,837	13,217	36,837	13,217
Clam, Washington							7,491	887
Octopus	4,025	252	169	23			26,346	1,737
Oyster, eastern							140,918	36,188
Oyster, native							18,560	3,007
Oyster, giant Pacific	1,455,605	29,549					1,635,067	49,469
Squid	14,000	315	137,455	3,740			14,271,968	234,253
Miscellaneous mollusk	18	11			33	5	169	46
Total pounds and value	62,638,956	\$1,672,329	355,749,930	\$28,527,217	99,541,312	\$14,783,498	603,117,120	\$53,184,536
Shipments: ¹								
Bonito			2,935	242			2,935	242
Cabrilla			15,362	2,234	982	143	16,344	2,377
Eel			508	183			508	183
Grouper			9,544	1,967	921	190	10,465	2,157
Halibut, California					10,460	1,638	10,460	1,638
Halibut, Pacific							40,529	8,106
Mackerel, Pacific					909	69	909	69
Sablefish			230,781	39,740			452,470	77,914
Salmon			357,397	109,114			439,053	134,044
Sculpin					674	101	674	101
Seabass, white					263	57	263	57
Shad							27,853	29,246
Sturgeon			21,665	6,928			21,665	6,928
Swordfish			1,081	194			1,081	194
Tuna, albacore			39,181,549	6,531,564	875,135	145,885	44,844,675	7,475,607
Tuna, bigeye	2,530	279	397,541	43,849			512,534	56,533
Tuna, bluefin			343,346	44,635			343,346	44,635
Tuna, skipjack			10,333,893	1,269,390	6,786,900	834,110	18,634,023	2,289,476
Tuna, yellowfin	2,338,254	330,863	26,470,000	3,745,505	3,931,037	556,242	40,526,143	5,734,450
Wahoo			132	40			132	40
Miscellaneous fish			114,275	26,706			131,365	30,700
Mollusk:								
Clam, Pismo			1,578,976	35,211			1,578,976	35,211
Total pounds and value	2,340,784	\$331,142	79,058,985	\$11,857,502	11,607,281	\$1,538,435	107,596,403	\$15,929,908
Grand totals	64,979,740	\$2,003,471	434,808,915	\$40,384,719	111,148,593	\$16,321,933	710,713,523	\$69,114,444

¹ See Table 14 for origin of shipments.

TABLE 25

Landings of the Commercial Fishing Boats in the Eureka Region During 1955, Shown by Port of Landing With the Corresponding Values

		Value	Pounds
Eureka region totals.....		\$2,905,700	24,169,544
Eureka.....	Salmon.....	\$619,322	1,772,344
	Dover sole.....	177,002	3,590,313
	Crab.....	60,517	341,326
	Petrals sole.....	47,625	560,295
	Rockfish.....	37,504	1,205,929
	English sole.....	37,125	631,371
	Sablefish.....	34,176	371,880
	Rex sole.....	12,734	231,109
	Pacific halibut.....	9,894	51,292
	Lingcod.....	8,669	123,849
	Albacore.....	7,220	46,942
	Sanddab.....	5,636	106,748
	All other.....	18,151	445,839
	Totals.....	\$1,075,575	9,479,237
Fort Bragg.....	Salmon.....	\$661,154	1,884,487
	Dover sole.....	81,151	1,646,062
	Sablefish.....	50,742	552,142
	Petrals sole.....	33,231	390,949
	Rockfish.....	15,286	501,605
	Lingcod.....	13,175	188,209
	English sole.....	12,096	205,712
	Rex sole.....	6,660	120,869
	Crab.....	2,778	15,670
	All other.....	5,847	122,659
	Totals.....	\$882,120	5,628,364
Crescent City.....	Salmon.....	\$342,227	985,831
	Crab.....	150,140	846,816
	Ocean shrimp.....	48,254	505,803
	Dover sole.....	4,671	94,748
	All other.....	11,071	161,958
	Totals.....	\$556,363	2,595,156
Fields Landing.....	Dover sole.....	\$113,189	2,295,926
	Petrals sole.....	54,256	638,311
	Rockfish.....	37,810	1,225,103
	Salmon.....	25,356	73,197
	English sole.....	14,048	238,904
	Crab.....	13,719	77,377
	Arrowtooth halibut.....	11,279	572,518
	Sablefish.....	10,368	112,814
	Lingcod.....	9,102	130,031
	Hake.....	8,341	496,497
	Rex sole.....	5,824	105,702
	All other.....	6,529	124,011
	Totals.....	\$309,821	6,090,391
Trinidad.....	Crab.....	\$46,842	264,199
	Salmon.....	9,906	29,201
	All other.....	7	142
	Totals.....	\$56,755	293,542
Point Arena.....	Salmon.....	\$22,860	64,546
	All other.....	72	919
	Totals.....	\$22,932	65,465
All other ports.....	All other.....	\$2,134	17,389
	Totals.....	\$2,134	17,389

TABLE 26

Landings of the Commercial Fishing Boats in the Sacramento Region During 1955, Shown by Port of Landing With the Corresponding Values

		Value	Pounds
Sacramento region totals.....		\$702,482	3,599,466
Pittsburg.....	Salmon.....	\$298,686	1,153,673
	Shad.....	22,584	379,709
	All other.....	421	7,012
	Totals.....	\$321,691	1,540,394
Sacramento.....	Salmon.....	\$91,556	353,633
	Hardhead.....	3,199	7,379
	All other.....	622	3,933
	Totals.....	\$95,377	364,945
Benicia.....	Salmon.....	\$92,356	356,726
	All other.....	1,713	26,068
	Totals.....	\$94,069	382,794
Port Costa.....	Salmon.....	\$70,231	271,268
	Totals.....	\$70,231	271,268
Martinez.....	Salmon.....	\$47,871	184,900
	Shad.....	4,950	71,939
	Totals.....	\$52,821	256,839
Clear Lake.....	Carp.....	\$26,945	449,083
	Hardhead.....	16,277	37,854
	Totals.....	\$43,222	486,937
Turlock.....	Carp.....	\$10,668	176,908
	All other.....	719	1,701
	Totals.....	\$11,387	178,609
All other ports.....	All other.....	\$13,684	117,680
	Totals.....	\$13,684	117,680

TABLE 27

Landings of the Commercial Fishing Boats and Shipments Into the San Francisco Region During 1955,
Shown by Port of Landing With the Corresponding Values

		Value	Pounds
San Francisco region totals.....		\$5,260,722	37,265,244
San Francisco.....	Yellowfin tuna.....	\$1,089,817	7,693,884
	Albacore.....	952,665	5,874,535
	Crab.....	408,539	2,678,945
	Salmon.....	290,121	855,471
	Skipjack.....	147,916	1,205,568
	Petrale sole.....	97,067	1,074,442
	English sole.....	81,455	1,528,237
	Bluefin tuna.....	57,504	436,959
	Sablefish.....	45,925	474,985
	Rockfish.....	36,508	922,514
	Shad.....	29,246	27,853
	Bay shrimp.....	16,591	222,700
	Smelt.....	14,823	346,008
	Dover sole.....	13,915	398,711
	Sanddab.....	12,831	287,695
	Bigeye tuna.....	12,405	112,463
	Rex sole.....	12,348	277,483
	Lingcod.....	12,066	172,870
	Flounder.....	10,203	250,680
	Pacific herring.....	9,794	403,047
	Pacific halibut.....	8,106	40,529
	Anchovy.....	7,357	206,650
	Sand sole.....	6,494	75,420
	All other.....	22,651	323,289
	Totals.....	\$3,396,347	25,890,938
Point Reyes (Drakes Bay).....	Salmon.....	\$583,915	1,703,865
	Crab.....	53,124	348,352
	Petrale sole.....	24,339	269,232
	English sole.....	16,942	317,862
	Rockfish.....	10,902	342,322
	Rex sole.....	5,008	112,544
	All other.....	18,530	388,133
	Totals.....	\$712,760	3,482,310
Bodega Bay.....	Salmon.....	\$375,390	1,095,391
	Crab.....	78,398	514,087
	English sole.....	25,838	484,761
	Petrale sole.....	21,532	238,190
	Ocean shrimp.....	21,730	308,725
	Rockfish.....	11,307	296,883
	Smelt.....	8,471	89,767
	Lingcod.....	6,387	91,504
	Rex sole.....	5,946	133,614
	All other.....	12,497	333,576
	Totals.....	\$567,496	3,586,498
Sausalito.....	Albacore.....	\$152,736	1,074,091
	Crab.....	82,983	544,152
	Salmon.....	77,931	227,403
	All other.....	7	78
	Totals.....	\$313,657	1,845,724
Oakland.....	Albacore.....	\$44,215	310,936
	Crab.....	28,838	189,100
	Salmon.....	20,422	59,585
	All other.....	1,529	20,519
	Totals.....	\$95,004	580,140
Tomaes Bay (Marshall).....	Eastern oyster.....	\$36,188	140,918
	Giant Pacific oyster.....	18,905	170,322
	Pacific herring.....	18,092	744,520
	All other.....	8,160	64,963
	Totals.....	\$81,345	1,120,723

TABLE 27—Continued

Landings of the Commercial Fishing Boats and Shipments Into the San Francisco Region During 1955,
Shown by Port of Landing With the Corresponding Values

		Value	Pounds
Princeton.....	Crab.....	\$24,992	163,879
	Salmon.....	20,846	60,828
	All other.....	4,171	32,132
	Totals.....	\$50,009	256,839
Richmond.....	Bay shrimp.....	\$31,311	420,280
	All other.....	653	5,119
	Totals.....	\$31,964	425,399
Berkeley.....	Salmon.....	\$5,180	15,089
	Crab.....	3,516	23,058
	Totals.....	\$8,696	38,147
All other ports.....	All other.....	\$3,444	38,526
	Totals.....	\$3,444	38,526

TABLE 28

Landings of the Commercial Fishing Boats and Shipments Into the Monterey Region During 1955,
Shown by Port of Landing With the Corresponding Values

		Value	Pounds
Monterey region totals.....		\$1,535,523	34,742,021
Monterey.....	Squid.....	\$201,566	12,366,028
	Rockfish.....	175,716	4,061,608
	Yellowfin tuna.....	151,063	1,054,124
	Skipjack.....	91,903	737,792
	Anchovy.....	66,895	5,106,520
	Salmon.....	39,409	110,420
	Albacore.....	35,991	245,669
	English sole.....	28,452	401,867
	Bluefin tuna.....	22,640	183,619
	Sardine.....	12,317	515,376
	Sablefish.....	11,933	352,019
	White croaker (kingfish).....	11,825	189,252
	Lingcod.....	7,654	77,701
	Petrale sole.....	7,175	71,391
	Sanddab.....	6,918	108,604
	Smelt.....	6,894	114,764
	Jack mackerel.....	6,136	103,995
	Pacific herring.....	5,078	186,565
	All other.....	26,919	579,444
	Totals.....	\$916,484	26,566,758
Moss Landing.....	Albacore.....	\$275,795	1,882,560
	Salmon.....	106,961	299,332
	Squid.....	28,476	1,747,000
	Anchovy.....	22,912	1,749,000
	Sardine.....	10,062	421,000
	Pacific herring.....	9,988	363,200
	Shark.....	5,014	95,690
	All other.....	10,273	140,579
	Totals.....	\$469,481	6,698,361
Santa Cruz.....	Salmon.....	\$70,297	196,717
	English sole.....	11,739	165,803
	California pompano.....	9,493	38,971
	Sablefish.....	8,931	263,442
	Smelt.....	7,126	124,583
	Rockfish.....	6,424	94,494
	White croaker (kingfish).....	5,413	86,605
	Petrale sole.....	5,339	53,120
	All other.....	24,796	453,167
	Totals.....	\$149,558	1,476,902

TABLE 29

Landings of the Commercial Fishing Boats and Shipments Into the Santa Barbara Region During 1955,
Shown by Port of Landing With the Corresponding Values

		Value	Pounds
Santa Barbara region totals		\$2,003,471	64,979,740
Port Hueneme	Sardine	\$570,967	33,586,295
	Jack mackerel	138,334	8,982,720
	Anchovy	56,188	3,087,260
	Pacific mackerel	15,524	988,777
	California halibut	8,445	35,632
	All other	3,342	35,236
	Totals	\$792,800	46,715,920
Port San Luis (Avila, Grover City)	Yellowfin tuna	\$330,863	2,338,254
	Salmon	87,164	249,968
	Abalone	12,479	93,334
	Rockfish	10,284	263,999
	Petrale sole	6,077	63,703
	All other	23,865	305,559
	Totals	\$470,732	3,314,817
Santa Barbara	Abalone	\$139,015	1,136,365
	Sardine	102,808	6,047,535
	Spiny lobster	88,926	191,569
	California halibut	19,433	81,994
	White seabass	18,396	84,191
	Jack mackerel	12,656	821,842
	Shark	7,213	106,490
	Petrale sole	5,561	58,288
	All other	13,312	399,199
	Totals	\$407,320	8,927,473
Morro Bay	Rockfish	\$108,913	3,073,382
	Abalone	43,090	322,291
	Giant Pacific oyster	29,549	1,455,605
	Salmon	17,753	50,938
	Petrale sole	17,534	183,796
	Crab	14,608	74,153
	Albacore	13,265	87,673
	All other	20,813	280,361
	Totals	\$265,525	5,528,199
San Simeon	Abalone	\$63,628	475,900
	Totals	\$63,628	475,900
All other ports	All other	\$3,466	17,431
	Totals	\$3,466	17,431

TABLE 30

Landings of the Commercial Fishing Boats and Shipments Into the Los Angeles Region During 1955,
Shown by Port of Landing With the Corresponding Values

		Value	Pounds
Los Angeles region totals.....		\$40,384,719	434,808,915
Terminal Island.....	Yellowfin tuna.....	\$15,739,458	104,555,473
	Skipjack.....	10,091,102	75,776,776
	Albacore.....	7,598,661	45,625,372
	Sardine.....	2,174,209	96,203,945
	Bluefin tuna.....	1,681,331	11,772,790
	Jack mackerel.....	468,367	21,886,303
	Pacific mackerel.....	298,101	12,960,892
	Anchovy.....	48,807	3,813,074
	Bigeye tuna.....	43,849	397,541
	Bonito.....	5,671	94,480
	All other.....	6,275	32,928
	Totals.....	\$38,155,831	373,119,574
San Pedro.....	Barracuda.....	\$137,028	852,695
	White seabass.....	114,592	483,888
	Spiny lobster.....	100,045	196,514
	Bluefin tuna.....	89,395	624,270
	Pacific mackerel.....	53,050	2,306,533
	Black sea bass.....	51,034	343,896
	Anchovy.....	49,935	3,901,142
	Grouper.....	44,670	229,431
	Rockfish.....	36,801	363,422
	Abalone.....	36,693	484,504
	Sardine.....	36,660	1,622,129
	Jack mackerel.....	34,836	1,627,865
	California halibut.....	32,270	154,626
	Yellowfin tuna.....	29,990	195,245
	Albacore.....	16,345	98,704
	Sculpin.....	14,929	64,907
	White croaker (kingfish).....	13,831	343,151
	Cabrilla.....	13,455	90,426
	Swordfish.....	10,968	25,207
	Halfmoon.....	8,403	34,382
	Shark.....	7,639	65,584
	Yellowtail.....	5,297	59,451
	All other.....	19,646	264,523
	Totals.....	\$957,512	14,432,495
Newport Beach.....	Pacific mackerel.....	\$129,197	5,617,275
	Abalone.....	81,677	1,108,687
	Albacore.....	41,625	251,358
	Spiny lobster.....	41,195	80,918
	Anchovy.....	38,769	3,028,811
	Swordfish.....	18,912	43,466
	Sardine.....	15,000	663,730
	White seabass.....	9,109	38,451
	Jack mackerel.....	8,773	409,937
	All other.....	16,564	98,319
	Totals.....	\$400,821	11,340,952
Long Beach.....	Anchovy.....	\$155,460	12,145,290
	Sardine.....	91,698	4,067,430
	Spiny lobster.....	59,138	116,161
	Rockfish.....	11,230	94,611
	Pacific mackerel.....	5,491	238,744
	Jack mackerel.....	5,156	240,940
	All other.....	14,936	99,594
	Totals.....	\$343,109	16,992,770
Los Angeles.....	Salmon.....	\$108,886	356,651
	Sablefish.....	39,740	230,781
	Pismo clam.....	35,211	1,578,976
	Sturgeon.....	6,928	21,665
	All other.....	26,889	114,783
	Totals.....	\$217,654	2,302,856

TABLE 30—Continued

Landings of the Commercial Fishing Boats and Shipments Into the Los Angeles Region During 1955,
Shown by Port of Landing With the Corresponding Values

		Value	Pounds
Wilmington.....	Anchovy.....	\$123,922	9,681,431
	Jack mackerel.....	27,982	1,307,584
	Pacific mackerel.....	20,760	902,623
	Sardine.....	11,692	517,365
	All other.....	914	21,290
	Totals.....	\$185,270	12,430,293
Santa Monica.....	Sardine.....	\$42,354	1,874,085
	Anchovy.....	22,501	1,757,875
	Spiny lobster.....	18,578	36,492
	Jack mackerel.....	6,703	313,236
	All other.....	8,537	101,102
	Totals.....	\$98,673	4,082,790
Redondo Beach.....	Spiny lobster.....	\$6,167	12,113
	All other.....	2,801	30,561
	Totals.....	\$8,968	42,674
Dana Point.....	Spiny lobster.....	\$8,098	15,906
	All other.....	35	239
	Totals.....	\$8,133	16,145
All other ports.....	All other.....	\$8,748	48,366
	Totals.....	\$8,748	48,366

TABLE 31

Landings of the Commercial Fishing Boats and Shipments Into the San Diego Region During 1955,
Shown by Port of Landing With the Corresponding Values

		Value	Pounds
San Diego region totals.....		\$16,321,933	111,148,593
San Diego.....	Yellowfin tuna.....	\$7,138,278	46,979,014
	Skipjack.....	5,653,311	42,804,843
	Albacore.....	3,023,813	18,264,393
	Bluefin tuna.....	132,897	923,536
	Spiny lobster.....	98,599	183,611
	White seabass.....	56,030	226,244
	Abalone.....	39,670	501,824
	Barracuda.....	36,394	264,633
	California halibut.....	28,036	139,695
	Swordfish.....	23,031	53,461
	Shark.....	16,597	160,429
	Rockfish.....	8,785	112,358
	Pacific mackerel.....	7,375	167,716
	Jackknife clam.....	6,668	18,585
	Yellowtail.....	6,156	82,303
	Sculpin.....	5,553	27,907
	All other.....	12,934	133,591
	Totals.....	\$16,294,127	111,044,143
Encinitas.....	White seabass.....	\$5,105	20,626
	All other.....	4,273	11,809
	Totals.....	\$9,378	32,435
Oceanside.....	White seabass.....	\$5,119	20,683
	All other.....	1,815	10,531
	Totals.....	\$6,934	31,214
Mission Beach.....	Jackknife clam.....	\$6,376	17,770
	Totals.....	\$6,376	17,770
All other ports.....	All other.....	\$5,118	23,031
	Totals.....	\$5,118	23,031

TABLE 32

Origin of Shipments of Fresh Fish Into California During 1956

Shipped from	Shipped to					Total pounds
	Eureka region	San Francisco region	Santa Barbara region	Los Angeles region	San Diego region	
Continental United States:						
Carp		1,535				1,535
Eel				2,950		2,950
Sablefish				110,280		110,280
Shad		3,317				3,317
Sturgeon				3,069		3,069
Tuna, skipjack				70		70
Tuna, yellowfin		2,362		52,473		54,835
Miscellaneous fish		22,540		131,049		153,589
Oregon, Washington, Canada and Alaska:						
Halibut, Pacific		45,916		290		46,206
Sablefish		293,440		199,692		493,132
Salmon	6,438	64,738		117,090		188,266
Shad		33,259				33,259
Sturgeon				20,532		20,532
Miscellaneous fish				36,568		36,568
South of the international boundary:						
Seabass, white					9,487	9,487
Crustacean:						
Shrimp, unclassified			5,100			5,100
Mollusk:						
Clam, Pismo			83,840	1,190,472		1,274,312
South America:						
Tuna, albacore				389,649		389,649
Tuna, bigeye			2,500	10,709		13,209
Tuna, bluefin				162,875		162,875
Tuna, skipjack				11,994,244	3,290,627	15,284,871
Tuna, yellowfin				4,083,810	7,326,047	11,409,857
Japan:						
Sardine		6,800				6,800
Swordfish		9,762		310		10,072
Tuna, albacore		4,077,481	2,000	15,820,775	32,870	19,933,126
Tuna, bigeye				654,873		654,873
Tuna, skipjack		492,344		64,927		557,271
Tuna, yellowfin		9,313,673	3,190,944	30,635,204		43,139,821
Total pounds	6,438	14,367,167	3,284,384	65,681,911	10,659,031	93,998,931

Recapitulation

	Pounds		Pounds
Carp	1,535	Tuna, albacore	20,322,775
Eel	2,950	Tuna, bigeye	668,082
Halibut, Pacific	46,206	Tuna, bluefin	162,875
Sablefish	603,412	Tuna, skipjack	15,842,212
Salmon	188,266	Tuna, yellowfin	54,604,513
Sardine	6,800	Miscellaneous fish	190,157
Seabass, white	9,487	Crustacean:	
Shad	36,576	Shrimp, unclassified	5,100
Sturgeon	23,601	Mollusk:	
Swordfish	10,072	Clam, Pismo	1,274,312
		Total pounds	93,998,931

TABLE 33

Origin of the Commercial Fish Landings and Shipments Into California During 1956

Species	Fishing boat landings				Shipments ¹	Total pounds of fishing boat landings and shipments combined
	California	North of the state boundary	South of the international boundary	Total fishing boat landings		
Anchovy	56,920,585			56,920,585		56,920,585
Barracuda, California	50,153		702,374	752,527		752,527
Bonito	22,491		105,123	127,614		127,614
Cabezon	12,397			12,397		12,397
Cabrilla			63,438	63,438		63,438
Carp	855,576			855,576	1,535	857,111
Corvina, shortfin			430	430		430
Croaker, white (kingfish)	889,850			889,850		889,850
Dolphinfish, common	149			149		149
Eel	430			430	2,950	3,380
Flounder	374,114	996		375,110		375,110
Flyingfish	50,724			50,724		50,724
Grouper			211,594	211,594		211,594
Hake	1,317,103	59,114		1,376,217		1,376,217
Halfmoon	15,108			15,108		15,108
Halibut, arrowtooth	1,011,411	59,186		1,070,597		1,070,597
Halibut, California	382,006		73,793	455,799		455,799
Halibut, Pacific	39,007	11		39,018	46,206	85,224
Hardhead	76,750			76,750		76,750
Herring, Pacific	1,735,776			1,735,776		1,735,776
Lingcod	909,006	22,255	50	931,311		931,311
Mackerel, jack	75,762,110			75,762,110		75,762,110
Mackerel, Pacific	50,012,780		229	50,013,009		50,013,009
Needlefish, California	525			525		525
Opaleye	3,433			3,433		3,433
Perch	187,681			187,681		187,681
Pompano, California	76,679			76,679		76,679
Ratfish	8,245			8,245		8,245
Rock bass			3,432	3,432		3,432
Rockfish	14,656,584	242,332	44,599	14,943,515		14,943,515
Sablefish	2,809,315	59,092		2,868,407	603,412	3,471,819
Salmon	11,401,372	13,115		11,414,487	188,266	11,602,753
Sanddab	787,972	828		788,800		788,800
Sardine	69,554,345			69,554,345	6,800	69,561,145
Sculpin	100,232			100,232		100,232
Sculpin, staghorn	1,565			1,565		1,565
Sea bass, black	39,610		291,708	331,318		331,318
Seabass, white	413,956		667,267	1,081,223	9,487	1,090,710
Seatrout, greenling	1,187			1,187		1,187
Shad	431,125			431,125	36,576	467,701
Shark	1,045,634		39,680	1,085,314		1,085,314
Sheep-head	4,965		1,610	6,575		6,575
Sierra			995	995		995
Skate	175,546		205	175,751		175,751
Smelt	466,333			466,333		466,333
Sole, Dover	7,244,572	1,023,852		8,268,424		8,268,424
Sole, English	3,769,360	55,592		3,824,952		3,824,952
Sole, petrale	2,536,234	293,824		2,830,058		2,830,058
Sole, rex	1,134,867	12,506		1,147,373		1,147,373
Sole, sand	77,062	250		77,312		77,312
Sole, unclassified	22,856			22,856		22,856
Splittail	127			127		127
Sturgeon					23,601	23,601
Swordfish	273,294		1,880	275,174	10,072	285,246
Tomcod	1,153			1,153		1,153
Tuna, albacore	15,874,652	115,985	21,064,574	37,055,211	20,322,775	57,377,986
Tuna, bigeye					668,082	668,082
Tuna, bluefin	2,612,046		10,013,922	12,625,968	162,875	12,788,843
Tuna, skipjack	875		120,152,347	120,153,222	15,842,212	135,995,434
Tuna, yellowfin	102		149,280,874	149,280,976	54,604,513	203,885,489

TABLE 33—Continued

Origin of the Commercial Fish Landings and Shipments Into California During 1956

Species	Fishing boat landings				Shipments ¹	Total pounds of fishing boat landings and shipments combined
	California	North of the state boundary	South of the international boundary	Total fishing boat landings		
Turbot.....	83,294			83,294		83,294
Wahoo.....			12,258	12,258		12,258
Whitebait.....	148,820			148,820		148,820
Whitefish, ocean.....	990		830	1,820		1,820
Yellowtail.....	18,598		352,289	370,887		370,887
Miscellaneous fish.....	2,000		346	2,346	190,157	192,503
Crustacean:						
Crab.....	14,320,169	290		14,320,459		14,320,459
Crab, rock.....	59,171			59,171		59,171
Lobster, spiny.....	735,969		125	735,994		735,994
Prawn.....	1,233			1,233		1,233
Shrimp, bay.....	718,968			718,968		718,968
Shrimp, ocean.....	1,168,179	340		1,168,519		1,168,519
Shrimp, unclassified.....					5,100	5,100
Mollusk:						
Abalone.....	4,284,063			4,284,063		4,284,063
Clam, gaper.....	688			688		688
Clam, jackknife.....	26,683			26,683		26,683
Clam, Pismo.....					1,274,312	1,274,312
Clam, Washington.....	10,629			10,629		10,629
Octopus.....	16,217			16,217		16,217
Oyster, eastern.....	142,181			142,181		142,181
Oyster, giant Pacific.....	6,101,220			6,101,220		6,101,220
Oyster, Kumamoto.....	23,965			23,965		23,965
Oyster, native.....	6,234			6,234		6,234
Squid.....	19,483,984			19,483,984		19,483,984
Miscellaneous mollusk.....	66			66		66
Total pounds.....	373,504,251	1,959,568	303,085,972	678,549,791	93,998,931	772,548,722

¹ For origin of shipments refer to Table 32.

TABLE 34
Monthly Landings and Shipments Into California During 1956

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Fishing boat landings:													
Anchovy.....	3,461,340	5,585,200	9,288,452	9,114,893	3,337,915	2,920,954	4,089,685	5,779,630	2,453,225	2,542,085	4,763,206	3,575,000	56,920,585
Barbauda, California.....	57,867	117,274	63,941	7,802	31,966	11,588	49,361	43,361	70,288	121,745	143,704	33,130	759,527
Bonito.....	21,473	6,942	1,004	120	1,886	77	284	669	34,791	4,834	40,652	14,852	127,614
Cabezon.....	150	918	638	714	1,973	1,691	758	1,380	540	856	1,371	12,917	12,917
Cabrilla.....	11,184	9,599	13,367			2,535				768	860	25,125	63,438
Carp.....	115,260	91,277	132,976	117,691	34,998	30,471	34,796	19,671	71,597	75,597	62,220	69,022	855,576
Corvina, shortfin.....												430	430
Croaker, white (kingfish).....	17,308	30,506	75,103	64,813	277,606	79,338	67,797	92,748	42,908	27,303	27,009	87,411	980,850
Dolphinfish, common.....					150	90	190	149					119
Eel.....													430
Flounder.....	8,170	25,027	46,234	29,556	67,332	13,347	6,717	17,304	22,310	61,596	44,121	33,396	375,110
Flyingfish.....					9,408	21,071	20,245						50,724
Grouper.....	31,948	10,766	47,980			4,035	1,325		125	4,780	37,182	73,444	211,594
Hake.....	7,950	25,101	46,373	99,954	145,021	180,534	133,637	181,711	159,521	138,404	143,144	114,867	1,376,217
Halibut.....		2,668	3,667	315	225	314			4,139	20	60	3,500	15,108
Halibut, arrowtooth.....	4,069	17,731	11,713	51,537	88,578	117,116	118,111	191,709	141,934	123,393	120,297	84,409	1,070,597
Halibut, California.....	24,818	43,315	55,248	60,723	36,109	36,024	44,849	48,210	27,851	16,437	27,191	35,024	455,790
Halibut, Pacific.....			20		5,076	26,146	2,338	4,499	889	50			38,018
Herring.....	7,380	13,459	12,940	4,720	1,465	38	449	17	4,188	14,227	11,073	6,794	76,750
Herring, Pacific.....	77,805	723,874	122,760	93,796	226,419	134,629	165,078	75,080	49,200	463	347	66,325	1,735,776
Lingcod.....	23,414	16,345	45,799	56,814	100,288	100,817	150,047	98,794	84,064	80,244	76,519	98,166	931,311
Mackerel, jack.....	9,535,735	9,995,538	4,466,037	3,175,002	5,501,062	2,384,923	1,543,647	2,690,521	6,354,485	10,538,456	14,451,421	5,125,283	75,762,110
Mackerel, Pacific.....	4,654,569	1,260,471	631,734	368,578	1,705,129	1,157,740	6,098,549	5,771,031	2,816,252	9,870,799	8,255,215	7,392,942	50,013,009
Needlefish, California.....										525			525
Opaleye.....		622	826	339		665	39		395	18		529	3,433
Perch.....	3,446	9,821	31,286	48,070	6		16,520	29,230	13,262	10,214	16,969	8,557	187,681
Pompano, California.....	35	1,166	3,579	1,673	2,354	7,461	5,883	12,869	10,211	11,885	12,600	6,963	76,679
Ratfish.....	1,175	200	3,400	2,000		70			1,400				8,245
Rock bass.....	1,381	180	1,176			695							3,432
Rockfish.....	1,082,443	1,205,034	1,350,043	1,319,695	1,401,851	934,646	1,270,558	1,174,488	1,280,850	1,451,516	1,317,273	1,155,118	14,943,515
Sablefish.....	176,481	146,738	232,692	291,568	275,189	258,543	211,096	170,844	210,359	275,125	442,070	237,702	2,868,407
Salmon.....	64,112	362	15,027	15,027	2,450,014	1,993,613	3,541,435	2,068,279	1,266,378	28,632	28,632	51,635	11,414,837
Sanddab.....	64,439	65,033	83,717	58,404	72,269	58,177	69,426	85,021	37,708	64,898	55,854	51,694	788,800
Sardine.....	4,013,807	165,250	156,620	240,361	241,313	261,451	265,804	402,336	274,442	50,665,141	8,955,089	3,922,732	69,554,345
Sculpin.....	678	1,985	2,330	4,147	5,596	28,903	28,517	21,913	3,886	472	218	587	100,232

TABLE 34—Continued
Monthly Landings and Shipments Into California During 1956

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Sculpin, staghorn.....	27,177	8,482	11,847	1,072	23,471	42,387	30,447	899	280	295	600	300	1,565
Sea bass, white.....	28,022	22,431	19,842	16,301	82,252	107,492	50,940	140,167	41,308	29,608	81,098	23,321	331,318
Seabass, black.....				70			95		148,441	256,358	155,804	53,173	1,081,223
Seatrout, greenling.....		78	45							382	403	141	1,157
Shad.....				74,333	350,206	6,586							431,125
Shark.....	118,363	77,384	420,431	63,590	50,524	76,672	62,014	30,611	28,821	37,042	61,091	57,868	1,085,314
Sheep-head.....	168	334	298	115	181	200			704	1,397	1,677	1,411	6,575
Sierra.....	80		575						340				905
Skate.....	14,802	20,200	28,361	28,094	11,609	11,027	7,475	4,060	7,750	12,415	20,115	20,115	175,781
Smelt.....	4,814	12,217	27,404	24,929	47,008	88,444	101,876	68,882	47,401	26,437	14,849	2,093	466,333
Sole, Dover.....	211,982	186,546	291,797	559,954	671,410	802,208	819,087	1,208,704	1,012,118	860,051	1,001,249	363,315	8,268,424
Sole, English.....	236,086	288,123	338,909	423,581	386,605	236,562	193,704	262,247	304,790	340,014	345,228	353,124	3,824,952
Sole, petrale.....	183,665	199,307	186,850	173,153	182,821	274,575	258,508	208,881	214,819	184,298	312,672	401,109	2,830,058
Sole, rex.....	134,766	113,333	102,380	79,387	92,189	53,240	56,702	90,871	88,163	91,009	141,383	106,650	1,147,373
Sole, sand.....	3,195	6,497	8,288	13,219	8,416	1,841	2,493	2,303	17,366	9,310	2,890	1,494	77,312
Sole, unclassified.....	690	1,355	1,603	859	877	2,437	1,146	1,540	1,010	4,716	5,642	981	22,856
Spittail.....		17						10					127
Swordfish.....							2,225	25,915	59,105	160,369	26,924	546	275,174
Tomcod.....		539	45	65	436				68				1,153
Tuna, albacore.....	362,722	22,849				210,517	11,186,341	10,115,668	7,758,516	4,681,705	1,662,157	1,054,736	37,055,211
Tuna, bluefin.....					333,609	2,478,487	580,704	5,220,248	2,644,251	650,816	708,513	150	12,623,068
Tuna, skipjack.....	10,528,037	10,604,426	9,935,768	8,035,713	9,735,507	9,588,813	8,861,819	10,202,851	13,674,290	7,130,270	11,870,750	10,054,975	120,153,222
Tuna, yellowfin.....	14,763,384	10,610,871	16,075,082	21,729,816	19,131,216	15,165,079	16,662,043	9,433,773	8,513,011	4,226,879	5,734,860	7,293,462	149,280,976
Turbot.....	7,303	8,513	7,790	3,063	6,185	5,638	2,167	1,392	6,952	9,519	10,504	13,628	83,204
Wahoo.....					12,258								12,258
Whitebait.....	822	5,567	9,088	11,825	32,126	40,384	28,886	14,676	609	146	181	4,510	148,820
Whitefish, ocean.....			1,240	261		18	820	6				75	1,820
Yellowtail.....	19,650	8,735	4,193	357	14,260	105,027	71,739	37,363	59,275	32,703	16,125	1,790	370,887
Miscellaneous fish.....		146	54	72	1,215	798	49	2	20	18		12	2,346
Crustacean:													
Crab.....	2,097,003	2,303,943	2,031,683	1,645,800	1,185,800	317,905	6,808	5,301	7,432		1,719,331	3,018,844	14,320,459
Crab, rock.....	3,978	3,861	1,567	508	1,232	2,871				6,500	10,519	8,504	59,171
Lobster, spiny.....	119,253	120,948	47,329				181	74	28	205,593	135,337	107,434	735,094
Prawn.....	221	255	243	37						82		77	1,233
Shrimp, bay.....	3,810	6,420	15,770	8,439	21,044	33,337	103,474	217,484	179,575	74,632	26,871	31,362	718,968
Shrimp, ocean.....					166,024	254,673	315,566	331,769	100,487				1,165,519

Mollusk:	282,388	195,486	474,985	577,737	485,827	465,497	388,430	280,571	282,036	500,749	350,357	4,284,063
Abalone.....	140	220	60	20				20	48			688
Clam, gaper.....	406	1,936	2,300	2,782	3,795	4,352	4,339	3,087	1,335	1,022	303	26,683
Clam, jackknife.....	325	2,716	6,193	26				241	326	189	378	10,629
Clam, Washington.....	1,908	1,592	2,055	1,386	986	617	464	762	498	1,809	1,598	16,217
Octopus.....												
Oyster, eastern.....	12,870	13,714	10,557	11,087	8,459	7,978	10,190	11,100	15,056	13,354	15,701	142,181
Oyster, giant Pacific.....	231,956	325,768	375,959	314,643	112,057	49,899	39,915	307,915	948,872	1,696,553	1,497,983	6,101,220
Oyster, Kumamoto.....								1,800	5,750	7,987	8,428	23,965
Oyster, native.....	461	1,313	1,370	1,500	730	294	69	1,800	37			6,234
Squid.....	44,395	78,020	338,223	3,882,668	4,588,340	2,373,720	1,645,800	1,229,735	392,620	2,611,030	2,294,130	19,483,984
Miscellaneous mollusk.....	12	5		20	12	10		7				66
Total pounds.....	52,848,881	44,386,612	49,264,967	53,360,423	45,916,176	60,250,950	58,906,833	52,294,649	96,780,435	68,046,550	49,370,914	678,549,791
Shipments: ¹												
Carp.....				500	1,035							1,535
Eel.....												2,950
Halibut, Pacific.....		10,330		402	3,110	32,364			2,950			46,206
Sablefish.....	87,078	68,525	42,324	106,419	25,037	47,283	47,097	51,177	25,749	74,970	16,472	603,412
Salmon.....	2,152	15,000	8,406	35	35	171	31,542	55,979	6,256	26,584		188,266
Sardine.....												6,800
Seabass, white.....				1,148	3,716	17,078	1,941	7,546				9,487
Shad.....		3,507		15,529	576		11,296	1,505	3,338			36,576
Sturgeon.....	78	2,406										23,601
Swordfish.....	504	5,256	138	4,174								10,072
Tuna, albacore.....	4,600,474	3,006,250	2,176,758	3,423,221	2,255,832	1,531,472	696,703	38,620	120,722	513,305	1,116,817	20,322,775
Tuna, bigeye.....												698,082
Tuna, bluefin.....					10,698	145,419	254,279					162,875
Tuna, skipjack.....	2,402,461	1,298,721	1,860,595	867,962	466,182	952,257	1,053,824	625,324	1,763,459	3,070,488	419,991	15,842,212
Tuna, yellowfin.....	5,712,143	3,948,285	4,948,177	6,339,741	3,859,972	5,013,990	4,171,111	3,905,092	4,845,523	3,481,263	2,934,046	54,604,513
Miscellaneous fish.....	3,000	11,050	35,744	2,000	2,200	5,875	11,005	7,410	22,450	9,515	6,100	190,157
Crustacean:												
Shrimp, unclassified.....		1,350							2,500		1,250	5,100
Mollusk:												
Clam, Pismo.....		455,040				735,432				32,640	19,200	1,274,312
Total pounds.....	12,807,890	8,292,993	9,608,290	9,604,440	6,038,754	7,901,271	6,278,798	4,692,653	6,821,997	7,211,715	4,820,676	93,998,931
Grand total fishing boat landings and shipments.....	65,656,771	52,679,605	56,730,691	62,964,863	51,954,930	68,152,221	65,185,631	59,987,302	103,602,432	75,258,265	53,891,590	772,548,722

¹ See Table 32 for origin of shipments.

TABLE 35
Monthly Landings and Shipments of Commercial Fish Into the Eureka Region During 1956

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Fishing boat landings from California waters:													
Flounder.....	746	4,581	5,205	19,547	14,615	1,080	1,007	6,035	8,151	19,412	17,583	5,151	103,223
Hake.....	5,730	21,351	17,108	43,455	100,327	115,835	75,562	161,626	128,403	114,711	128,215	104,227	1,026,560
Halibut, arrowtooth.....	3,169	17,311	10,298	49,872	74,195	102,635	106,140	181,149	140,404	115,530	109,061	73,284	983,309
Halibut, California.....											55		175
Halibut, Pacific.....			20		5,076	26,146	2,338	4,488	889	50			39,007
Herring, Pacific.....	68,568					67		200					68,835
Lingcod.....		2,989	6,314	17,057	34,839	32,296	60,646	53,807	36,517	22,082	30,881	53,312	350,672
Perch.....	242	3,113	9,806	11,806	7,706	9,298	7,706	15,754	9,298	4,766	5,837	3,803	72,221
Rockfish.....	25,318	210,525	257,961	256,540	398,470	172,644	343,028	245,997	316,437	289,177	237,832	152,268	2,876,497
Sablefish.....	1,431	17,365	21,712	48,572	77,008	82,390	71,622	71,816	104,550	150,050	267,334	125,789	1,039,779
Salmon.....	323	3,170	11,959	11,689	1,161,068	1,016,116	2,421,607	1,466,779	232,923				6,298,493
Sanddab.....					7,794	7,962	6,402	13,381	17,508	2,961	7,253	6,942	97,334
Shark.....			160	6,650	3,746	3,448				165	55		14,004
Skate.....			115	1,405	4,206	23,352	56,458			1,305		70	120,982
Smelet.....		173						27,215	6,663				
Sole, Dover.....	5,718	5,121	4,687	250,001	484,186	722,323	759,404	1,128,208	871,135	723,426	819,406	308,055	6,081,783
Sole, English.....	12,867	81,164	122,451	141,591	167,115	93,420	76,911	108,927	133,417	108,886	128,151	120,883	1,295,503
Sole, petrale.....	5,209	62,173	67,588	67,911	50,316	70,403	80,833	71,888	72,139	62,173	118,670	183,621	969,823
Sole, rex.....	5,147	7,202	23,784	35,241	43,654	30,964	39,939	62,351	52,961	48,177	62,070	45,579	456,276
Sole, sand.....	15	200	529	4,684	963			265	2,419	3,080	895	1,075	14,115
Sole, unclassified.....	30	220		90				155		4,395	4,900	330	10,120
Tuna, albacore.....								43,619	285,256	170,574	604		500,063
Turbot.....	193	301	43	608	121	70		23	580	100	4,517	1,350	7,806
Whitebait.....	11	2,377	4,764	6,297	17,318	23,299	23,041	10,841	29				88,177
Miscellaneous fish.....						11							11
Crustacean:													
Crab.....	1,295,701	1,796,424	1,901,183	1,558,196	1,115,089	317,905	177,310	309,744	100,487		40	4,146	7,988,684
Shrimp, ocean.....					108,875	199,180							895,596
Mollusk:													
Clam, Washington.....	235	325	2,716	6,193	26			156	241	326	189	378	10,629
Octopus.....	64		128	690	200		362		85		180		1,774
Oyster, giant Pacific.....			144,000	255,450	241,800	42,450	23,150		248,500	795,000	1,402,000	1,223,700	4,381,050
Oyster, Kumamoto.....									1,800	5,750	7,987	8,428	23,965
Total pounds.....	1,477,369	2,235,533	2,612,492	2,793,438	4,080,986	3,083,796	4,342,646	3,984,264	2,780,929	2,642,127	3,353,695	2,429,491	35,816,766

TABLE 36
Monthly Landings of the Commercial Fishing Boats in the Sacramento Region During 1956

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Fishing boat landings from California waters:													
Carp	115,260	91,277	132,976	117,691	34,998	30,471	34,717	19,671	71,597	75,597	62,220	68,622	855,097
Hardhead	7,380	13,459	12,940	4,720	1,465	38	449	17	4,188	14,227	11,073	6,794	76,750
Salmon	112	333		15,011	20,935	670		148,803	873,454		28,632	51,635	1,139,585
Shad				74,333	350,206	6,586		110					431,125
Spittail		17											127
Miscellaneous fish		110											110
Total pounds, Sacramento region	122,752	105,196	145,916	211,755	407,604	37,765	35,166	168,601	949,239	89,824	101,925	127,051	2,502,794

TABLE 37
Monthly Landings and Shipments of Commercial Fish Into the San Francisco Region During 1956

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Fishing boat landings from California waters:													
Anchovy			300	21,050	22,326	5,750	39,225	161,100	122,950	15,280			387,981
Cabezon					100	90							190
Carp							79					400	479
Croaker, white (kingfish)	310	75		300	157	4,134	2,362	440	474	336	570	479	9,637
Flounder	4,815	19,410	38,620	5,966	50,181	9,480	3,000	1,381	9,544	41,623	22,092	16,929	223,041
Hake													7,290
Halibut, arrowtooth	900	420			5,700	1,500							27,777
Halibut, California	4,396	1,288	1,454	1,665	2,844	4,681	7,083	5,319	1,440	363	883	725	27,777
Herring, Pacific	8,549	723,524	122,735	3,278	329	377	1,897	141	198	2,160	1,883	1,771	15,801
Lingcod	12,617	8,855	21,167	13,692	32,092	50,364	71,809	18,793	30,025	32,856	11,575	13,820	925,121
Mackerel, jack													317,665
Perch	1,613		15,332	17,607			334	99	1,440	1,690			3,229
Rockfish	228,904	283,848	312,287	173,537	130,285	45,767	90,779	103,267	330,976	488,978	727	1,703	44,497
Sablefish	80,645	55,873	90,896	95,470	123,361	71,536	27,644	35,913	58,626	81,490	61,852	37,910	2,942,396
Salmon					683,436	736,139	1,052,802	331,834	114,375				830,216
Sandlabb	57,832	53,480	49,232	33,480	41,430	22,561	22,565	31,392	24,069	37,792	42,029	40,235	2,938,586
Sculpin, staghorn													455,097
Seabass, white									280	295	660	300	1,565
Shark	3,690	8,568	9,065		80	217	2,994	3,166	116	31			197
Skate	7,785	10,390	13,840	12,400	7,105	3,970	4,530	3,380	4,670	7,258	1,566	2,003	43,282
										9,615	5,575	10,730	96,940
Smelt	690	4,165	24,639	15,297	10,675	22,251	17,548	25,939	17,432	7,134	1,660	62	117,492
Sole, Dover	206,264	71,136	193,443	103,892	86,271	29,874	29,874	61,501	62,734	61,038	50,076	8,383	1,115,950
Sole, English	181,378	120,798	121,514	217,016	146,969	86,243	79,699	87,062	179,649	171,892	161,013	181,956	1,730,489
Sole, petrale	93,756	42,372	77,165	70,698	91,532	80,767	97,924	97,924	69,302	51,286	52,731	92,329	883,473
Sole, rex	98,410	82,238	58,948	32,694	39,528	12,729	9,838	18,080	21,889	29,388	54,582	46,780	885,773
Sole, sand													505,101
Sole, unclassified	3,180	6,297	7,509	8,535	7,463	1,841	2,493	2,038	14,947	6,230	1,895	419	62,847
Tomcod	405	750	60	60					299	120			62,847
Tuna, albacore			45	65	436				68				1,643
Turbot													1,153
Whitehait	6,462	6,223	5,671	2,480	4,633	2,616	1,483	973,445	1,730,782	482,374	55,838	1,390	3,243,829
Miscellaneous fish	811	2,590	4,046	5,499	14,506	16,761	3,525	911	6,372	9,344	5,691	11,111	63,985
				22							181	4,510	53,340
Crustacean:													22
Crab													
Shrimp, bay	742,716	451,436	94,193	32,591	47,217	33,337	103,474	217,434	176,575	74,632	1,684,660	2,021,848	5,974,661
Shrimp, ocean	3,610	6,420	15,770	8,439	21,044	55,493	137,916	22,025			26,871	31,362	718,968
					57,149								272,583

TABLE 37—Continued
Monthly Landings and Shipments of Commercial Fish Into the San Francisco Region During 1956

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Mollusk:													
Alalone	880	418	950	2,000	2,575	1,725	3,050	1,925	1,750	1,500	1,375	1,025	17,965
Octopus	12,870	12,115	13,714	10,557	11,087	8,430	7,978	10,190	11,100	15,056	13,351	15,701	5,249
Oyster, eastern	12,006	18,250	21,043	22,906	17,693	16,557	19,749	13,715	20,165	50,672	78,178	32,108	142,181
Oyster, giant Pacific	461	445	1,313	1,370	1,800	720	294	69	25	37			325,145
Oyster, native													6,234
Total pounds	1,785,655	1,995,703	1,317,291	1,043,863	1,656,946	1,352,331	1,834,391	2,251,286	3,020,962	1,680,171	2,763,455	3,871,686	24,573,740
Fishing boat landings from waters north of the state boundary													
Tuna, albacore										768			768
Total pounds										768			768
Fishing boat landings from waters south of the international boundary													
Tuna, skipjack					1,369								1,369
Tuna, yellowfin				150,572	65,119								215,691
Total pounds				150,572	66,488								217,060
Shipments ¹													
Carp					500	1,035							1,535
Halibut, Pacific			10,040		402	3,110	32,364						45,916
Shadfish	33,301	1,000	55,925	7,324	36,724	20,087	25,788		23,550	16,170	73,553		293,440
Salmon			5,006	552			171	12,608	17,725	6,256	22,420		61,738
Sardine												6,800	6,800
Shad					1,148	3,716	17,078	11,296		3,338			36,576
Swordfish	504		5,256		4,002								3,762
Tuna, albacore	807,517	164,430	265,260	895,243	442,486		453,910	393,060	35,620	120,722	212,795	283,438	4,077,481
Tuna, skipjack		40,260	452,984										492,344
Tuna, yellowfin	816,426	1,027,473	1,181,461	583,046	886,073	883,340	929,179	200,032	400,250	805,450	977,391	625,914	9,310,035
Miscellaneous fish	3,000	10,500	2,000	2,000	2,000	1,000	1,000	1,040					22,540
Total pounds	1,660,748	1,243,663	1,977,032	1,488,165	1,373,335	912,288	1,459,490	618,036	480,154	951,945	1,280,159	916,152	14,367,167
Grand totals, San Francisco region	3,446,403	3,239,366	3,294,323	2,682,600	3,096,769	2,264,619	3,293,881	2,869,322	3,501,116	2,632,884	4,049,614	4,787,838	39,158,735

¹ See Table 32 for origin of shipments.

Monthly Landings of the Commercial Fishing Boats in the Monterey Region During 1956

THE MARINE FISH CATCH OF CALIFORNIA

83

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Fishing boat landings from California waters:													
Anchovy		1,600	2,515,212	3,935,667	1,217,895	105,000	4,850	704,760	373,425	200,750	599,200	1,364	9,658,359
Cabezon	50	273	513	539	1,704	863	400	1,380	521	777	3,778	482	9,762
Croaker, white (kingfish)	2,463	5,606	7,480	12,835	21,424	41,176	29,071	74,770	30,566	11,496	7,052		244,421
Eel					150	90	190						430
Flounder	2,572	1,036	1,841	4,015	2,180	2,597	2,620	9,009	4,610	531	4,446	11,181	46,633
Hake	2,200	3,750	29,285	56,509	35,704	49,945	51,200	13,550	16,400	14,500	6,030	4,200	283,253
Halibut, arrowtooth													235
Halibut, California	1,728	256	344	366	332	2,289	3,658	1,646	119	330	1,416	2,131	14,615
Herring, Pacific			25	86,234	226,419	134,562	165,078	74,880	49,200	100			736,498
Lingcod	6,439	1,838	11,296	13,018	20,933	7,667	11,845	15,110	4,724	10,287	21,493	20,296	144,946
Mackerel, jack				4,605	4,065	1,472	11,824	1,427,259	822,184	181,235	1,650		2,454,324
Mackerel, Pacific							35,503	8,345					43,848
Needlefish, California							3,448	3,840	145	625			525
Perch	270	180	1,520	11,580	6	585	4,392	11,582	6,451	3,607	7,139	763	28,916
Pompano, California			120	708	1,329						531		29,341
Ratfish						70			1,400				8,245
Rockfish	1,175	200	3,400	2,000		500,788	701,188	567,502	394,093	327,102	273,378	423,079	5,616,156
Sablefish	468,955	384,168	437,841	510,534	627,528		109,208	54,945	38,967	36,257	97,350	67,364	891,214
Seabfish	84,828	65,432	110,060	70,583	62,157	94,363	109,208	54,945	38,967	36,257	97,350	67,364	891,214
Salmon					510,517	113,446	30,116	72,843	26,047				752,969
Sanddab	3,939	4,670	20,866	12,549	18,630	21,984	36,712	35,680	15,679	22,828	6,088	2,916	202,541
Sardine					80	100	548		100				828
Seabass, white			408	268	220		104	207	360	44	56		1,667
Seatrout, greenling				70			95						165
Shark	108,690	9,500	360,883	29,128	1,113	2,996	19,059	718	5,812	3,681	3,275	27,556	572,411
Skate	5,420	6,773	13,590	8,446	234	1,124	2,560	402	116		6,570	9,385	51,620
Smelt													
Sole, Dover	250	5,713	1,290	4,555	29,649	41,343	25,043	11,765	22,389	15,384	9,002	1,863	168,246
Sole, English			445	1,025	2,725	1,105	1,745		80	1,165	1,110	1,070	13,890
Sole, petrale	30,115	40,220	69,973	52,778	59,099	40,784	41,486	73,524	61,494	39,450	42,032	38,767	589,722
Sole, rex	8,952	16,804	17,769	22,456	13,933	10,609	6,522	25,572	23,757	11,364	20,078	8,425	186,241
Sole, rex	22,031	9,781	9,246	5,284	6,133	7,857	6,625	6,405	4,781	6,969	14,145	6,100	105,357
Sole, sand													
Sole, unclassified											100		100
Tuna, albacore	255	284	1,307	655	363	349	354	1,221	472	47	668	624	6,599
Tuna, yellowfin								915,449	3,284,945	401,695	54,096	3,886	4,660,071
Turbot						155			32		191	59	405

TABLE 38—Continued
Monthly Landings of the Commercial Fishing Boats in the Monterey Region During 1956

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Whitebait		400	278	29	302	324	2,320	2,924	580	146			7,303
Crustacean:													
Crab	906	4,600	4,157	521							8,828	12,193	31,205
Prawn	221	255	243	37			184	74	28	32	82	77	1,233
Mollusk:													
Clam, gaper	140	220	160	60	20				20		48	20	688
Octopus	713	518	1,299	463	306	164	104	221	126	323	1,019	727	5,983
Squid	1,990			258,215	3,882,551	4,333,170	2,113,425	1,585,305	1,229,190	344,960	2,607,805	2,237,630	18,594,241
Miscellaneous mollusk	12	5											17
Total pounds	754,014	564,118	3,620,831	5,105,732	6,747,731	5,516,977	3,421,477	5,704,308	6,418,813	1,635,610	3,796,491	2,882,158	46,168,260
Fishing boat landings from south of the international boundary:													
Tuna, bluefin					19,869								19,869
Tuna, skipjack					270,448	2,123							2,169
Tuna, yellowfin					290,363	90,503							360,951
Total pounds						92,626							382,989
Grand totals, Monterey region.	754,014	564,118	3,620,831	5,105,732	7,038,094	5,609,603	3,421,477	5,704,308	6,418,813	1,635,610	3,796,491	2,882,158	46,551,249

TABLE 39
Monthly Landings and Shipments of Commercial Fish Into the Santa Barbara Region During 1956

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Fishing boat landings from California waters:													
Anchovy	12,160	27,000	19,460	39,680	98,120	25,300	87,280	138,940	108,510	800	200	7	557,450
Cabezon	645	645	125	205	169	738	358	70	19	79	65	54	2,335
Craker, white (knifish)	2,433	1,746	3,645	3,361	151	190	70	1,863	160	5	55	1,202	14,157
Flounder	37	8	28	8	190	190	16,081	13,957	11,033	5,587	2,315	16,774	143,505
Halibut, California	7,114	10,689	14,240	17,510	16,698	10,907	16,081	13,957	11,033	5,587	2,315	16,774	143,505
Herring, Pacific	350	350	4,284	4,284	10,604	5,595	2,503	4,557	11,299	12,727	11,786	10,643	4,634
Langcod	2,134	2,134	6,922	12,829	421,400	267,702	40,878	182,656	223,240	4,484,171	2,168,992	2,802,345	95,315
Mackerel, jack	1,511,280	519,500	853,220	581,000	57,600	9,000	42,000	213,250	138,005	4,653,705	4,713,868	2,009,070	14,056,984
Mackerel, Pacific	1,321	2,757	4,728	7,077	57,600	9,000	4,942	8,862	3,283	3,223	3,266	2,588	11,836,493
Perch	1,321	2,757	4,728	7,077	57,600	9,000	4,942	8,862	3,283	3,223	3,266	2,588	42,047
Pompano, California	320,311	194,141	249,062	282,598	196,809	158,792	61,122	147,811	169,093	295,005	316,119	185,620	274
Rockfish	877	5,063	6,132	12,181	7,329	5,603	1,036	1,785	800	185	2,255	4,252	2,576,483
Sablefish	1,586	2,967	782	157	74,058	119,844	36,802	16,089	17,375	611	470	264,248	47,501
Salmon	12,000	694	727	20	87	417	9,196	10,853	5,572	1,072	304	557	8,785
Sardine	388	694	727	20	87	417	9,196	10,853	5,572	1,072	304	557	15,446,144
Sea bass, black	1,489	43,970	34,649	12,712	18,101	25,336	20,490	6,625	1,963	2,263	927,860	772,705	41,260
Seabass, white	88	116	645	175	138	34	2,512	8,171	19,582	138	71	90	41,260
Seatrust, greenling	1,147	1,874	645	120	432	381	2,512	8,171	19,582	410	310	705	9,885
Shark	3,874	10,678	24,301	10,494	10,188	12,517	8,171	8,751	19,582	15,020	13,836	8,392	2,949
Sheep-head	11,716	10,678	24,301	10,494	10,188	12,517	8,171	8,751	19,582	15,020	13,836	8,392	153,646
Skate	29,648	25,115	24,041	27,064	44,279	30,676	14,424	16,803	42,600	18,655	111,743	110,141	495,189
Smelt	9,178	11,312	20,387	6,078	2,446	802	30	2,070	4,955	6,185	8,586	6,101	68,130
Sole, Dover	92	92	285	33	112	384	563	19	106	154	74	27	1,849
Sole, petrale	92	92	285	33	112	384	563	19	106	154	74	27	13,199
Sole, rex	92	92	285	33	112	384	563	19	106	154	74	27	320,084
Sole, unclassified	92	92	285	33	112	384	563	19	106	154	74	27	320,084
Swordfish	648	2,089	2,076	75	1,431	2,797	1,361	28,633	125,627	138,879	25,284	300	11,098
Tuna, albacore	648	2,089	2,076	75	1,431	2,797	1,361	28,633	125,627	138,879	25,284	300	335
Turbot	648	2,089	2,076	75	1,431	2,797	1,361	28,633	125,627	138,879	25,284	300	11,098
Miscellaneous fish	648	2,089	2,076	75	1,431	2,797	1,361	28,633	125,627	138,879	25,284	300	335

TABLE 39—Continued
Monthly Landings and Shipments of Commercial Fish Into the Santa Barbara Region During 1956

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Crustacean:													
Crab	57,680	51,483	31,860	54,552	23,584	60	337	162	247	858	25,803	80,657	325,619
Crab, rock	988	1,152	198							1,164	1,164	4,862	10,028
Lobster, spiny	47,372	45,164	19,484							26,486	28,903	31,021	198,430
Mollusk:													
Abalone	186,448		97,969	267,850	363,710	256,077	286,420	265,110	200,462	212,537	326,068	246,142	2,708,793
Octopus	451	596	147	444	446	323		26,200	39,250		30	134	2,571
Oyster, giant Pacific	219,050	181,450	159,825	97,600	55,150	53,050	7,000		545	103,200	216,075	237,175	1,395,025
Squid												12,000	12,545
Total pounds	2,443,060	1,142,855	1,565,212	1,438,535	1,405,109	1,009,011	800,775	1,361,789	1,338,295	23,084,347	8,910,890	6,545,065	51,044,943
Shipments ¹													
Tuna, albacore											2,000		2,000
Tuna, bigeye					2,500								2,500
Tuna, yellowfin	208,204	447,790	339,950	397,826	242,174	272,000	339,300	248,000	380,700	155,000		160,000	3,190,944
Crustacean:													
Shrimp, unclassified										2,500		1,250	5,100
Mollusk:			1,350										
Clam, Fismo													
Total pounds	208,204	447,790	341,300	397,826	244,674	272,000	339,300	248,000	380,700	189,500	32,640	19,200	83,840
Grand totals, Santa Barbara region	2,651,264	1,590,645	1,906,512	1,836,361	1,649,783	1,281,011	1,140,075	1,609,789	1,718,995	23,273,847	8,945,530	6,725,515	54,329,327

¹ See Table 32 for origin of shipments.

TABLE 40
Monthly Landings and Shipments of Commercial Fish Into the Los Angeles Region During 1956

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Fishing boat landings from California waters:													
Anchovy	3,449,180	5,556,600	6,753,480	5,118,496	1,999,574	2,793,904	3,958,330	4,774,830	1,848,340	2,325,255	4,163,806	3,575,000	40,316,795
Barbauda, California					1,188	970	2,994	2,190	59			245	7,646
Bonito			888	120	1,700	40		613	729	137	16,500		20,727
Cabezon	100												100
Croaker, white (kingfish)	11,972	22,014	63,817	47,867	255,765	33,396	36,190	13,172	9,571	14,896	18,760	86,200	613,620
Flyingfish													
Halibut		2,668	3,667	315	9,408	21,071	20,245		4,139	20	60	3,500	50,724
Halibut, California	6,378	24,345	29,149	25,988	5,040	8,218	1,161	4,354	1,724	1,560	3,872	4,351	15,108
Herring, Pacific	688												116,140
Lingcod								70	12	12			688
													94
Mackerel, jack	8,024,455	9,475,446	3,612,817	2,583,348	5,075,567	2,115,749	1,490,945	1,080,302	5,307,526	5,870,559	12,107,385	2,322,938	59,067,037
Mackerel, Pacific	4,654,127	1,259,954	638,107	366,819	1,646,843	1,147,414	6,019,994	5,543,920	2,650,439	5,186,104	3,519,630	5,368,812	37,992,163
Opaleye		622	826	339		378			395	18		523	3,101
Pompano, California	35	1,130	3,459	965	1,025	6,856	1,447	1,217	3,620	8,278	12,060	6,963	47,064
Rockfish	32,446	51,338	70,130	72,249	58,298	35,090	33,507	50,858	37,308	25,632	46,538	54,196	567,590
Sablefish			116	26	106	10	146		70	131			605
Salmon		17				3,935	8	40					4,000
Sanddab	759	746	878	1,449	3,180	3,935	3,452	3,293	2,512	1,317	584	1,047	24,215
Sardine	4,001,807	105,250	156,620	240,361	241,223	236,727	109,780	140,835	62,242	37,562,938	8,021,379	3,150,027	54,089,199
Sculpin		9	205	834	4,578	20,255	18,790	12,747	3,018	238	197	587	62,136
Sea bass, black	337	33	105	118	118	612	411	744	348	755	108	31,990	35,099
Seabass, white	26	5,429	2,297	9,915	41,438	45,410	22,062	25,630	17,558	25,802	15,518	3,350	214,435
Shark	2,088	5,136	5,903	6,253	12,215	11,193	8,644	13,540	5,540	5,601	10,771	4,753	91,637
Sheep-head	49	183	264	41	91	1,139			108	98	16	12	47,064
Skate	450	1,163	126	113	61	1,690	180	68	23	51	135		1,001
Snelt													4,060
Sole, petrale		2,166	1,360	3,672	2,475	1,100	315	1,235	677	2,204	4,187	100	19,491
Sole, unclassified						965	243						1,208
Swordfish			11	21	402	1,704	229	145	133				2,645
Tuna, albacore	271												211,089
						963	356,371	1,219,572	1,426,381	1,145,579	655,764	489,739	5,291,640
Tuna, bluefin					20		65,805	1,333,097	718,754	11,391	432,820		2,561,896
Tuna, skipjack										375	66	225	666
Whitefish, ocean			410			18	55						483
Yellow tail					1,307	302	265	456	180	126		37	2,673
Miscellaneous fish				50	135	334	36						555

TABLE 40—Continued
Monthly Landings and Shipments of Commercial Fish Into the Los Angeles Region During 1956

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Crustacean:													
Crab, rock	2,262	2,429	885	508	1,232	2,811	6,471	5,139	7,185	4,612	8,073	2,382	43,980
Crab, rock	57,129	59,021	18,209							94,769	68,506	49,550	347,184
Crab, rock													
Mollusk:													
Abalone	55,411		80,890	122,414	161,251	187,134	158,954	97,690	54,355	54,199	144,205	75,968	1,192,471
Octopus		60	74	80,008	90	69	51	17	17	27	42	55	502
Squid	42,405	5,305	78,020		115	255,170	260,295	60,495		47,660	3,225	44,500	877,198
Miscellaneous mollusk					20	12	10		7				49
Total pounds	20,343,073	16,641,064	11,512,713	8,682,379	9,524,610	6,938,151	12,577,513	14,410,346	12,212,832	52,508,023	29,273,569	15,277,050	209,902,323
Fishing boat landings from waters north of the state boundary:													
Tuna, albacore									52,280	58,978			111,258
Total pounds									52,280	58,978			111,258
Fishing boat landings from waters south of the international boundary:													
Barracuda, California	35,005	92,822	59,391			2,356	43,465	40,911	56,802	93,040	123,134	14,706	561,632
Bonito	13,765	4,491							11,390	1,038	10,563	41,247	41,247
Cabrilla	11,184	9,599	13,367			2,535				768	860	25,125	63,438
Shortfin, corvina												430	430
Grouper	31,948	10,551	47,989			4,035	1,325		125	4,780	37,182	73,444	211,379
Halibut, California	1,848							4,540		2,615	430		9,433
Lingcod										50			50
Rock bass	1,381	55	1,176			695							3,307
Rockfish	1,560	16,540	1,335							2,080	8,475		29,990
Sea bass, black	26,181	5,570	10,217		23,103	41,285	29,140	155	40,584	27,924	79,188		283,347
Seabass, white	1,892	4,555	12,841	566		12,094	7,685	85,041	52,295	156,278	92,047	18,016	444,310
Shark		2,765	1,170	82	51	2,869		121	4,750	4,412	10,178	580	26,978
Sheep-head												320	320
Serra												995	995
Swordfish	80		575						340				978
Tuna, albacore	74,970	8,574				36,286	3,975,305	2,011,176	104,362			5,916	6,216,066
Tuna, bluefin					313,708	2,478,487	452,361	3,212,879	1,888,001	497,886	275,039	150	9,118,489
Tuna, skipjack	5,906,253	5,828,270	4,900,382	4,407,237	5,689,927	8,114,323	5,376,047	6,510,213	5,381,058	493,708	4,691,986	5,337,143	62,638,547
Tuna, yellowfin	6,741,480	7,223,368	9,833,428	12,942,573	12,413,786	12,090,482	11,432,335	5,983,226	4,692,963	453,103	3,392,950	4,865,055	92,063,749
Wahoo					6,560								6,560

Whitefish, ocean.....	19,468	4,478	480																	480
Yellowtail.....			3,700																	270,287
Miscellaneous fish.....																				164
Total pounds.....	12,867,015	13,211,638	14,886,051	17,350,458	18,450,907	22,880,209	21,378,310	17,849,052	12,280,261	51,615	8,185	12,907	1,045	10,341,930	171,991,704					
Shipments: ¹																				
Pel.....																				
Flatout, Pacific.....																				2,950
Sablefish.....	53,777	10,281	12,600	35,000	69,695	4,950	21,495	47,097	27,618											290
Salmon.....	2,152	15,000	37,100	7,854	35	35		13,998	36,752											300,972
Sturgeon.....	78	2,406	3,507		15,529	576			1,505											117,060
Swordfish.....																				23,601
Tuna, albacore.....	3,792,957	2,841,820	1,911,498	2,527,978	1,813,346	1,531,472	388,691	303,643												310
Tuna, bigeye.....																				16,210,424
Tuna, bluefin.....																				665,582
Tuna, skipjack.....	1,527,825	1,235,590	484,199	971,317	530,023	466,182	708,551	785,025	625,324											182,875
Tuna, yellowfin.....	2,789,188	2,034,540	2,440,729	4,079,508	3,927,223	2,704,632	3,522,125	2,782,544	3,124,142											12,069,241
Miscellaneous fish.....		550	71,808	33,744		1,200	4,875	9,965	7,410											34,771,487
Mollusk:																				167,617
Clam, Pismo.....			455,040																	1,190,472
Total pounds.....	8,165,977	6,140,187	5,579,646	7,659,095	6,373,221	4,854,466	5,635,389	4,196,551	3,822,751					4,133,962	5,729,462					65,641,911
Grand totals, Los Angeles region.....	41,376,065	35,942,889	31,978,410	33,691,932	34,348,738	34,682,886	39,591,212	36,455,949	28,374,124	58,447,740	43,740,067	29,010,184	447,690,196							

¹ See Table 32 for origin of shipments.

TABLE 41
Monthly Landings and Shipments of Commercial Fish Into the San Diego Region During 1956

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Fishing boat landings from California waters:													
Barracuda, California		14	48	267	30,778	8,262	2,407	321		64		346	42,507
Bonito					186	87	284	56	368	191		77	1,764
Croaker, white (kingfish)	70	1,065	161	450	109	83	104	2,503	2,137	575	562	196	8,015
Dolphinfish, common								149					149
Halibut, California	698	6,737	9,887	16,204	13,710	14,187	1,390	3,674	1,320	370	13,773	9,820	91,770
Lingcod		34				12				203	52	13	314
Mackerel, jack		592		5,449				205	95		173,394		180,586
Mackerel, Pacific	442	288	3,627	1,759	686	1,326	1,062	5,516	27,813	30,990	51,717	15,060	140,276
Opaleye					287		39					6	332
Rockfish	1,453	11,030	8,230	18,565	5,917	3,969	3,338	4,524	5,141	3,637	3,012	8,506	77,322
Salmon		12		16		3,463							3,491
Sardine						12,324					5,850		18,174
Sculpin		1,976	2,125	3,313	1,018	9,648	9,727	9,166	868	234	21		38,096
Sea bass, black	164				250	73	371		82	724	292		3,190
Seabass, white	12,193	1,548	3,263	5,457	40,507	42,070	6,558	13,488	1,177	7,461	14,711	7,964	156,397
Shark	1,641	7,145	8,341	13,907	18,964	34,061	10,454	5,494	4,783	12,658	31,389	19,500	168,337
Sheep-head		35		74	325	90			46	799	1,440	989	3,565
Skate	31		34	485		795					165		1,770
Smelt						37						157	157
Swordfish							1,740	1,178	6,108		7,580		49,006
Tuna, albacore		590				1,666	52,952	44,662	174,365	1,150,752	304,654	126,324	1,855,965
Tuna, bluefin							21,611	4,886	23,653				50,150
Tuna, skipjack										47	162		209
Tuna, yellowfin										70			70
Whitefish, ocean				261			165	6				75	507
Yellowtail				387	8,892	879	359	312	1,443	3,299	354		15,925
Miscellaneous fish		36			76	234	13	2				6	367
Crustacean:													
Crab, rock	798	280	484							1,120	1,282	1,260	5,154
Lobster, spiny	14,752	16,763	9,636							84,238	38,003	26,863	190,255

THE MARINE FISH CATCH OF CALIFORNIA

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Mollusk:	40,529	15,677	82,631	50,201	40,891	17,073	23,705	24,004	13,800	29,101	27,222	364,834
Abalone	406	1,936	2,300	2,782	3,795	4,352	4,339	3,087	1,335	1,022	303	26,683
Clam, jackknife			138									138
Octopus												
Total pounds	73,107	63,449	151,663	174,491	178,126	133,989	124,186	276,670	1,346,082	678,727	245,764	3,495,425
Fishing boat landings from waters south of the international boundary:												
Barracuda, California	22,862	4,502	7,535			495	139	13,427	28,641	20,570	18,133	140,742
Bonito	7,708	116						22,304	3,094	13,428	14,775	63,876
Grouper												215
Halibut, California	2,656	922		46	20,062	19,758		13,457	3,815	3,467	177	64,360
Mackerel, Pacific												229
Rock Bass	125											125
Rockfish	3,496	6,607	160			260		735	47	802		14,609
Sea bass, black	475	1,525	954			525		294	503	1,206		8,361
Seabass, white	13,523	306	75			5,335	4,898	70,363	65,670	29,266	23,286	222,957
Shark	765	420	1,508			373	950	1,303	1,904	2,628	2,551	12,702
Sheep-head								640		150		790
Skate						205						205
Swordfish						388					546	904
Tuna, albacore	287,481	13,685			171,622	6,800,352	4,875,153	574,508	1,131,676	563,820	427,181	14,845,478
Tuna, bluefin				104		40,927	669,486	13,843	180,569	645		875,564
Tuna, skipjack	4,621,784	4,776,156	3,618,476	4,044,165	1,412,367	3,485,772	3,692,641	8,293,232	6,636,140	7,178,536	4,717,007	57,512,262
Tuna, yellowfin	8,021,904	3,387,503	8,636,671	6,381,863	2,984,994	5,229,708	3,450,547	3,820,016	3,773,706	2,341,910	2,368,407	56,639,483
Wahoo				5,698								5,698
Whitfish, ocean		350										350
Yellowtail	182	4,257	493	307	148	10,108	35,805	6,037	21,093	2,864	708	82,002
Miscellaneous fish				182								182
Crustacean:												
Lobster, spiny									100	25		125
Total pounds	12,982,836	8,224,945	12,265,379	10,432,319	4,569,177	15,594,480	12,749,377	12,830,159	11,816,948	10,159,347	7,573,371	130,491,219
Shipments: ¹												
Seabass, white							1,941	7,546				9,487
Tuna, albacore												32,870
Tuna, skipjack	874,636	22,871	289,668	328,639	243,706	243,706	268,799		376,279	161,454	32,870	3,200,697
Tuna, yellowfin	1,908,925	438,482	384,700	1,284,271		223,386	940,535		1,170,311			7,326,047
Total pounds	2,772,961	461,353	674,368	1,613,210		467,092	1,211,275	7,546	1,546,590	161,454	32,870	10,659,091
Grand totals, San Diego region.	15,828,904	8,735,469	13,091,410	12,220,020	4,747,303	16,195,561	14,084,838	13,114,375	14,709,620	10,999,528	7,852,005	144,645,675

¹ See Table 32 for origin of shipments.

TABLE 42

The Value, by Region, of the Annual Landings and Shipments of Commercial Fish
Into California During 1956

Species	Eureka region		Sacramento region		San Francisco region		Monterey region	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Fishing boat landings:								
Anchovy					387,981	\$7,760	9,658,359	\$124,592
Barracuda, California								
Bonito					190	2	9,762	387
Cabezon								
Cabrilla								
Carp			855,097	\$35,914	479	34		
Corvina, shortfin								
Croaker, white (kingfish)					9,637	877	244,421	12,978
Dolphinfish, common								
Eel							430	13
Flounder	104,229	\$4,232			223,041	9,458	46,638	2,453
Flyingfish								
Grouper								
Hake	1,085,674	18,999			7,290	110	283,253	2,804
Halfmoon								
Halibut, arrowtooth	1,042,585	20,122			27,777	849	235	7
Halibut, California	175	42			15,801	3,379	14,615	3,220
Halibut, Pacific	39,018	9,836						
Hardhead			76,750	32,619				
Herring, Pacific	68,835	1,742			925,121	12,582	736,498	33,510
Lingcod								
Mackerel, jack	372,927	30,915			317,665	21,030	144,946	13,088
Mackerel, Pacific					3,229	95	2,454,324	58,413
Needlefish, California							43,848	2,228
Opaleye							525	26
Perch	72,221	10,610			44,497	6,570	28,916	2,715
Pompano, California							29,341	11,118
Ratfish							8,245	79
Rock bass								
Rockfish	3,118,829	102,335			2,942,536	112,863	5,616,156	250,325
Sablefish	1,098,871	93,953						
Salmon	6,311,608	2,230,873	1,139,585	361,933	830,216	21,917	891,214	24,686
Sanddab	98,162	5,389			2,938,586	983,927	752,969	259,925
Sardine					455,097	22,665	202,541	12,153
Sculpin							828	117
Sculpin, staghorn								
Sea bass, black					1,565	78		
Seabass, white								
SeatROUT, greenling					197	66	1,667	461
Shad			431,125	27,279			165	4
Shark	220	11			43,282	1,925	572,411	30,264
Sheep-head								
Sierra								
Skate	14,004	2			96,940	1,338	54,620	551
Smelt	120,962	6,835			147,492	13,513	168,246	11,610
Sole, Dover	7,105,635	349,597			1,145,950	41,025	13,890	536
Sole, English	1,351,995	87,416			1,730,489	102,098	589,722	40,101
Sole, Petrale	1,263,647	126,112			883,773	77,771	186,241	18,047
Sole, rex	468,782	26,346			505,104	24,700	105,357	5,247
Sole, sand	14,365	1,202			62,847	5,492	100	7
Sole, unclassified	10,120	395						
Splittail			127	13	1,643	104	6,599	553
Swordfish								
Tomcod					1,153	40		
Tuna, albacore	504,022	71,570			3,244,597	517,838	4,660,071	733,961
Tuna, bluefin							19,869	2,583
Tuna, skipjack					1,369	157	2,169	249
Tuna, yellowfin					215,691	29,118	360,983	47,975
Turbot	7,806	421			63,985	2,661	405	18
Wahoo								

TABLE 42—Continued

The Value, by Region, of the Annual Landings and Shipments of Commercial Fish
Into California During 1956

Species	Santa Barbara region		Los Angeles region		San Diego region		Total	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Fishing boat landings:								
Anchovy	557,450	\$10,480	46,316,795	\$578,960			56,920,585	\$721,792
Barracuda, California			569,278	103,210	183,249	\$31,006	752,527	134,216
Bonito			61,974	2,950	65,640	4,070	127,614	7,020
Cabezon	2,345	117	100	4			12,397	510
Cabrilla			63,438	9,395			63,438	9,395
Carp							855,576	35,948
Corvina, shortfin			430	65			430	65
Croaker, white (kingfish)	14,157	795	613,620	21,949	8,015	691	889,850	37,290
Dolphinfish, common					149	12	149	12
Eel							430	13
Flounder	1,202	70					375,110	16,213
Flyingfish			50,724	5,052			50,724	5,052
Grouper			211,379	39,740	215	39	211,594	39,779
Hake							1,376,217	21,913
Halibut			15,108	3,774			15,108	3,774
Halibut, arrowtooth							1,070,597	20,978
Halibut, California	143,505	32,160	125,573	32,222	156,130	34,505	455,799	105,528
Halibut, Pacific							39,018	9,836
Hardhead							76,750	32,619
Herring, Pacific	4,634	174	688	14			1,735,776	48,022
Lingcod	95,315	8,511	144	15	314	28	931,311	73,587
Mackerel, jack	14,056,984	212,260	59,067,037	1,258,129	180,536	2,690	75,762,110	1,531,587
Mackerel, Pacific	11,836,493	200,037	37,992,163	858,924	140,505	4,623	50,013,009	1,065,512
Needlefish, California							525	26
Opaleye			3,101	481	332	50	3,433	531
Perch	42,047	9,243					187,681	29,138
Pompano, California	274	66	47,064	11,338			76,679	22,522
Ratfish							8,245	79
Rock bass			3,307	538	125	10	3,432	548
Rockfish	2,576,483	96,367	597,580	61,229	91,931	7,729	14,943,515	630,848
Sablefish	47,501	1,872	605	54			2,868,407	142,482
Salmon	264,248	95,694	4,000	1,689	3,491	1,418	11,414,487	3,935,459
Sanddab	8,785	459	24,215	3,592			788,800	44,258
Sardine	15,446,144	293,477	54,089,199	1,379,275	18,174	632	69,554,345	1,673,501
Sculpin			62,136	15,193	38,096	7,677	100,232	22,870
Sculpin, staghorn							1,565	78
Sea bass, black	721	96	319,046	48,973	11,551	1,524	331,318	50,593
Seabass, white	41,260	11,599	658,745	157,309	379,354	86,986	1,081,223	256,421
SeatROUT, greenling	1,022	56					1,187	60
Shad							431,125	27,279
Shark	169,747	11,406	118,615	12,693	181,039	17,711	1,085,314	74,010
Sheep-head	399	34	1,821	115	4,355	322	6,575	471
Sierra			995	69			995	69
Skate	4,152	342	4,060	272	1,975	132	175,751	2,637
Smelt	9,985	398	19,491	1,254	157	16	466,333	33,626
Sole, Dover	2,949	141					8,268,424	391,299
Sole, English	153,646	9,926					3,824,952	239,541
Sole, petrale	495,189	48,133	1,208	79			2,830,058	270,142
Sole, rex	68,130	3,672					1,147,373	59,965
Sole, sand							77,312	6,701
Sole, unclassified	1,849	176	2,645	197			22,856	1,425
Splittail							127	13
Swordfish	13,199	5,046	212,065	85,208	49,910	20,733	275,174	110,987
Tomcod							1,153	40
Tuna, albacore	320,084	47,469	11,624,994	2,051,472	16,701,443	2,911,061	37,055,211	6,333,371
Tuna, bluefin			11,680,385	1,525,458	925,714	121,546	12,625,968	1,649,587
Tuna, skipjack			62,637,213	7,190,752	57,512,471	6,631,188	120,153,222	13,822,346
Tuna, yellowfin			92,064,749	12,447,154	56,639,553	7,657,668	149,280,976	20,181,915
Turbot	11,098	513					83,294	3,613
Wahoo			6,560	2,296	5,698	1,994	12,258	4,290

TABLE 42—Continued

The Value, by Region, of the Annual Landings and Shipments of Commercial Fish
Into California During 1956

Species	Eureka region		Sacramento region		San Francisco region		Monterey region	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Fishing boat landings:—Contd.								
Whitebait	88,177	\$6,984			53,340	\$7,772	7,303	\$880
Whitefish, ocean								
Yellowtail								
Miscellaneous fish	11	1	110	\$22	22	6		
Crustacean:								
Crab	7,988,974	1,131,239			5,974,661	633,588	31,205	4,400
Crab, rock								
Lobster, spiny							1,233	493
Prawn								
Shrimp, bay					718,968	54,354		
Shrimp, ocean	895,936	79,828			272,583	20,117		
Mollusk:								
Abalone					17,965	2,842		
Clam, gaper							688	68
Clam, jackknife								
Clam, Washington	10,629	1,227						
Octopus	1,774	68			5,249	229	5,983	590
Oyster, eastern					142,181	37,905		
Oyster, giant Pacific	4,381,050	72,725			325,145	37,555		
Oyster, Kumamoto	23,965	398						
Oyster, native					6,234	1,369		
Squid							18,594,241	317,961
Miscellaneous mollusk							17	5
Total pounds and value	37,664,308	\$4,491,425	2,502,794	\$457,780	24,791,568	\$2,817,779	46,551,249	\$2,031,401
Shipments: ¹								
Carp					1,535	\$129		
Eel								
Halibut, Pacific					45,916	11,938		
Sablefish					293,440	51,939		
Salmon	6,438	\$1,916			64,738	31,346		
Sardine					6,800	204		
Seabass, white								
Shad					36,576	38,405		
Sturgeon								
Swordfish					9,762	3,417		
Tuna, albacore					4,077,481	733,539		
Tuna, bigeye								
Tuna, bluefin								
Tuna, skipjack					492,344	50,761		
Tuna, yellowfin					9,316,035	1,328,467		
Miscellaneous fish					22,540	3,167		
Crustacean:								
Shrimp, unclassified								
Mollusk:								
Clam, Pismo								
Total pounds and value	6,438	\$1,916			14,367,167	\$2,253,312		
Grand totals	37,670,746	\$4,493,341	2,502,794	\$457,780	39,158,735	\$5,071,091	46,551,249	\$2,031,401

¹ See Table 32 for origin of shipments.

TABLE 42—Continued

The Value, by Region, of the Annual Landings and Shipments of Commercial Fish
Into California During 1956

Species	Santa Barbara region		Los Angeles region		San Diego region		Total	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
Fishing boat landings:—Contd.								
Whitebait							148,820	\$15,636
Whitefish, ocean			963	\$77	857	\$64	1,820	141
Yellowtail			272,960	24,867	97,927	7,139	370,887	32,006
Miscellaneous fish	935	\$186	719	178	549	110	2,346	503
Crustacean:								
Crab	325,619	46,889					14,320,459	1,816,116
Crab, rock	10,028	302	43,989	3,876	5,154	137	59,171	4,315
Lobster, spiny	198,430	98,460	347,184	184,599	190,380	101,663	735,994	384,722
Prawn							1,233	493
Shrimp, bay							718,968	54,354
Shrimp, ocean							1,168,519	99,945
Mollusk:								
Abalone	2,708,793	350,340	1,192,471	100,386	364,834	27,016	4,284,063	480,584
Clam, gaper							688	68
Clam, jackknife					26,683	9,689	26,683	9,689
Clam, Washington							10,629	1,227
Octopus	2,571	141	502	99	138	17	16,217	1,144
Oyster, eastern							142,181	37,905
Oyster, giant Pacific	1,395,025	28,040					6,101,220	138,320
Oyster, Kumamoto							23,965	398
Oyster, native							6,234	1,369
Squid	12,545	314	877,198	18,949			19,483,984	337,224
Miscellaneous mollusk			49	4			66	9
Total pounds and value	51,044,943	\$1,625,461	382,008,285	\$28,243,828	133,986,644	\$17,691,896	678,549,791	\$57,359,570
Shipments: ¹								
Carp							1,535	\$129
Eel			2,950	\$1,180			2,950	1,180
Halibut, Pacific			290	107			46,206	12,045
Sablefish			309,972	56,884			603,412	108,823
Salmon			117,090	62,034			188,266	95,296
Sardine							6,800	204
Seabass, white					9,487	\$912	9,487	912
Shad							36,576	38,405
Sturgeon			23,601	14,734			23,601	14,734
Swordfish			310	109			10,072	3,526
Tuna, albacore	2,000	\$860	16,210,424	3,002,163	32,870	5,424	20,322,775	3,741,986
Tuna, bigeye	2,500	406	665,582	85,128			668,082	85,534
Tuna, bluefin			162,875	20,392			162,875	20,392
Tuna, skipjack			12,059,241	1,278,280	3,290,627	393,514	15,842,212	1,722,555
Tuna, yellowfin	3,190,944	543,737	34,771,487	4,958,414	7,326,047	991,214	54,604,513	7,821,832
Miscellaneous fish			167,617	43,631			190,157	46,798
Crustacean:								
Shrimp, unclassified	5,100	2,856					5,100	2,856
Mollusk:								
Clam, Pismo	83,840	2,633	1,190,472	25,595			1,274,312	28,228
Total pounds and value	3,284,384	\$550,492	65,681,911	\$9,548,651	10,659,031	\$1,391,064	93,998,931	\$13,745,435
Grand totals	54,329,327	\$2,175,953	447,690,196	\$37,792,479	144,645,675	\$19,082,960	772,548,722	\$71,105,005

¹ See Table 32 for origin of shipments.

TABLE 43

Landings of the Commercial Fishing Boats and Shipments Into the Eureka Region During 1956,
Shown by Port of Landing With the Corresponding Values

		Value	Pounds
Eureka region totals.....		\$4,493,341	37,670,746
Eureka.....	Salmon.....	\$849,824	2,400,142
	Crab.....	344,362	2,431,933
	Dover sole.....	134,196	2,727,555
	Giant Pacific oyster.....	72,725	4,381,050
	Albacore.....	49,479	348,447
	English sole.....	42,341	654,421
	Petrale sole.....	37,057	371,310
	Rockfish.....	32,208	932,577
	Sablefish.....	18,026	210,832
	Rex sole.....	10,410	185,225
	Pacific halibut.....	9,505	37,702
	Perch.....	8,052	54,810
	Lingcod.....	6,676	80,525
	All other.....	15,413	359,571
	Totals.....	\$1,630,274	15,176,100
Fort Bragg.....	Salmon.....	\$883,444	2,506,058
	Dover sole.....	102,512	2,083,574
	Sablefish.....	67,665	791,406
	Petrale sole.....	32,373	324,378
	Rockfish.....	26,994	896,246
	English sole.....	22,740	351,465
	Lingcod.....	14,916	179,929
	Crab.....	11,160	78,815
	Albacore.....	9,626	67,791
	Rex sole.....	7,591	135,075
	Arrowtooth halibut.....	7,150	370,450
	Hake.....	6,737	384,982
	All other.....	8,401	142,882
	Totals.....	\$1,201,309	8,313,051
Crescent City.....	Crab.....	\$532,314	3,759,281
	Salmon.....	429,418	1,212,460
	Ocean shrimp.....	78,472	880,713
	Albacore.....	12,465	87,784
	All other.....	13,130	194,530
	Totals.....	\$1,065,799	6,134,768
Field's Landing.....	Crab.....	\$143,890	1,016,173
	Dover sole.....	112,247	2,281,451
	Petrale sole.....	55,110	552,207
	Rockfish.....	41,540	1,243,937
	English sole.....	20,618	318,664
	Arrowtooth halibut.....	12,689	657,470
	Hake.....	11,876	678,645
	Sablefish.....	8,223	96,181
	Rex sole.....	7,998	142,312
	Lingcod.....	5,642	68,060
	All other.....	7,397	67,376
	Totals.....	\$427,230	7,122,476
Trinidad.....	Crab.....	\$97,164	686,183
	All other.....	4,587	13,357
	Totals.....	\$101,751	699,540
Point Arena.....	Salmon.....	\$30,977	87,493
	All other.....	2,376	16,935
	Totals.....	\$33,353	104,428
Shelter Cove.....	Salmon.....	\$29,115	82,273
	All other.....	173	1,969
	Totals.....	\$29,288	84,242
All other ports.....	All other.....	\$4,337	36,141
	Totals.....	\$4,337	36,141

TABLE 44

Landings of the Commercial Fishing Boats in the Sacramento Region During 1956,
Shown by Port of Landing With the Corresponding Values

		Value	Pounds
Sacramento region totals.....		\$457,780	2,502,794
Pittsburg.....	Salmon.....	\$176,274	555,019
	Shad.....	16,618	265,319
	All other.....	57	1,213
	Totals.....	\$192,949	821,551
Sacramento.....	Salmon.....	\$57,581	181,301
	Hardhead.....	17,956	42,250
	Shad.....	5,434	90,261
	Carp.....	5,399	128,545
	All other.....	2	17
	Totals.....	\$86,372	442,374
Martinez.....	Salmon.....	\$50,881	160,203
	All other.....	1,860	28,120
	Totals.....	\$52,741	188,323
Benicia.....	Salmon.....	\$42,061	132,433
	All other.....	3,371	47,530
	Totals.....	\$45,432	179,963
Port Costa.....	Salmon.....	\$35,136	110,629
	Totals.....	\$35,136	110,629
Clear Lake.....	Carp.....	\$22,943	546,260
	Hardhead.....	10,774	25,350
	Totals.....	\$33,717	571,610
Turlock.....	Hardhead.....	\$3,889	9,150
	Carp.....	3,883	92,442
	All other.....	22	110
	Totals.....	\$7,794	101,702
All other ports.....	Carp.....	\$3,639	86,642
	Totals.....	\$3,639	86,642

TABLE 45

Landings of the Commercial Fishing Boats and Shipments Into the San Francisco Region During 1956,
Shown by Port of Landing With the Corresponding Values

		Value	Pounds
San Francisco region totals.....		\$5,071,091	39,158,735
San Francisco.....	Yellowfin tuna.....	\$1,357,585	9,531,726
	Albacore.....	899,001	5,114,208
	Crab.....	365,824	3,444,675
	Salmon.....	237,868	681,591
	Rockfish.....	87,877	2,262,881
	English sole.....	75,743	1,283,786
	Sablefish.....	70,457	994,873
	Petrale sole.....	56,195	638,584
	Skipjack.....	50,918	493,713
	Shad.....	38,405	36,576
	Dover sole.....	37,525	1,048,190
	Bay shrimp.....	23,690	313,360
	Rex sole.....	19,859	406,122
	Sanddab.....	16,846	338,267
	Lingcod.....	11,998	181,246
	Pacific halibut.....	11,938	45,916
	Anchovy.....	7,760	387,981
	Smelt.....	6,736	73,793
	Flounder.....	5,576	131,506
	Sand sole.....	5,323	60,909
	All other.....	26,395	571,229
	Totals.....	\$3,413,519	28,041,132
Point Reyes (Drakes Bay).....	Salmon.....	\$438,206	1,308,859
	Crab.....	48,283	454,639
	Rockfish.....	20,558	578,439
	Giant Pacific oyster.....	20,017	173,300
	Petrale sole.....	16,316	185,420
	English sole.....	10,582	179,358
	Lingcod.....	7,058	106,603
	All other.....	14,424	362,192
	Totals.....	\$575,444	3,348,810
Bodega Bay.....	Salmon.....	\$256,313	765,570
	Crab.....	139,779	1,316,191
	Ocean Shrimp.....	18,309	248,088
	English sole.....	15,767	267,245
	Smelt.....	5,492	62,735
	Petrale sole.....	5,241	59,554
	All other.....	24,294	440,468
	Totals.....	\$465,195	3,159,851
Sausalito.....	Albacore.....	\$173,606	1,087,756
	Salmon.....	49,986	149,159
	Crab.....	21,140	207,713
	All other.....	393	9,142
	Totals.....	\$245,125	1,453,770
Oakland.....	Albacore.....	\$174,141	1,091,106
	Crab.....	29,685	279,528
	Salmon.....	20,960	62,482
	All other.....	1,901	24,559
	Totals.....	\$226,687	1,457,675
Tomaes Bay (Marshall).....	Eastern oyster.....	\$37,905	142,181
	Giant Pacific oyster.....	17,538	151,845
	Pacific herring.....	8,394	617,200
	All other.....	5,255	46,549
	Totals.....	\$69,092	957,775
Princeton.....	Crab.....	\$28,573	269,048
	Salmon.....	11,936	35,652
	All other.....	4,797	33,920
	Totals.....	\$45,306	338,620
Richmond.....	Bay shrimp.....	\$28,074	371,351
	All other.....	889	6,775
	Totals.....	\$28,963	378,126
All other ports.....	All other.....	\$1,760	22,976
	Totals.....	\$1,760	22,976

TABLE 46

Landings of the Commercial Fishing Boats in the Monterey Region During 1956,
Shown by Port of Landing With the Corresponding Values

		Value	Pounds
Monterey region totals.....		\$2,031,401	46,551,249
Monterey.....	Squid.....	\$257,932	15,083,766
	Rockfish.....	226,483	5,115,444
	Albacore.....	165,750	1,052,379
	Anchovy.....	109,629	8,498,400
	Salmon.....	98,232	284,567
	Yellowfin tuna.....	47,975	360,983
	Jack mackerel.....	45,886	1,927,978
	English sole.....	30,748	452,176
	Sablefish.....	15,076	544,265
	Petrale sole.....	10,071	103,933
	Lingcod.....	9,083	100,589
	Sanddab.....	6,761	112,675
	All other.....	33,859	767,127
	Totals.....	\$1,057,485	34,404,282
Santa Cruz.....	Salmon.....	\$77,950	225,810
	Albacore.....	28,712	182,300
	Rockfish.....	23,834	500,512
	Pacific herring.....	13,011	285,953
	Sablefish.....	9,610	346,949
	English sole.....	9,121	134,131
	California pompano.....	8,348	22,031
	Petrale sole.....	7,944	81,981
	Smelt.....	5,376	78,042
	All other.....	21,184	437,589
	Totals.....	\$205,090	2,295,298
Moss Landing.....	Albacore.....	\$539,499	3,425,392
	Salmon.....	83,743	242,592
	Squid.....	59,895	3,502,615
	Shark.....	28,089	541,033
	Pacific herring.....	18,499	406,580
	Anchovy.....	13,950	1,081,400
	Jack mackerel.....	11,516	483,860
	All other.....	13,635	168,197
	Totals.....	\$768,826	9,851,669

TABLE 47

Landings of the Commercial Fishing Boats and Shioments Into the Santa Barbara Region During 1956,
Shown by Port of Landing With the Corresponding Values

		Value	Pounds
Santa Barbara region totals.....		\$2,175,953	54,329,327
Port San Luis (Avila, Grover City).....	Yellowfin tuna.....	\$543,737	3,190,944
	Salmon.....	74,210	204,915
	Albacore.....	21,951	148,016
	Petrals sole.....	15,039	154,721
	Crab.....	14,415	100,106
	Abalone.....	9,507	68,942
	Rockfish.....	8,211	154,224
	All other.....	9,604	228,073
	Totals.....	\$696,674	4,249,941
Port Hueneme.....	Sardine.....	\$274,358	14,439,885
	Jack mackerel.....	203,051	13,447,066
	Pacific mackerel.....	190,156	11,251,815
	Abalone.....	15,470	176,040
	All other.....	6,351	242,536
	Totals.....	\$689,386	39,557,342
Santa Barbara.....	Abalone.....	\$116,382	945,577
	Spiny lobster.....	95,411	192,284
	California halibut.....	29,981	133,785
	Sardine.....	16,744	881,240
	White seabass.....	11,349	40,373
	Shark.....	10,595	161,156
	Pacific mackerel.....	9,881	584,678
	Petrals sole.....	9,779	100,605
	Jack mackerel.....	9,179	607,892
	English sole.....	6,737	104,285
	Anchovy.....	6,052	321,900
	Rockfish.....	5,163	157,292
	Swordfish.....	5,046	13,199
	All other.....	8,919	138,257
	Totals.....	\$341,218	4,382,523
Morro Bay.....	Abalone.....	\$95,688	696,680
	Rockfish.....	82,947	2,264,308
	Crab.....	32,474	225,513
	Giant Pacific oyster.....	28,040	1,395,025
	Albacore.....	25,194	169,885
	Petrals sole.....	\$23,315	239,863
	Salmon.....	21,325	58,893
	Perch.....	8,861	40,157
	Lingcod.....	7,093	79,429
	All other.....	7,400	139,692
	Totals.....	\$332,337	5,309,445
San Simeon.....	Abalone.....	\$111,217	806,504
	Totals.....	\$111,217	806,504
All other ports.....	All other.....	\$5,121	23,572
	Totals.....	\$5,121	23,572

TABLE 48

Landings of the Commercial Fishing Boats and Shipments Into the Los Angeles Region During 1956,
Shown by Port of Landing With the Corresponding Values

		Value	Pounds
Los Angeles region totals.....		\$37,792,479	447,690,196
Terminal Island.....	Yellowfin tuna.....	\$17,352,801	126,445,944
	Skipjack.....	8,469,023	74,696,374
	Albacore.....	5,003,051	27,548,831
	Bluefin tuna.....	1,483,716	11,367,498
	Sardine.....	1,226,640	48,103,535
	Jack mackerel.....	994,964	46,711,942
	Pacific mackerel.....	534,754	23,661,671
	Anchovy.....	150,067	12,005,371
	Bigeye tuna.....	85,128	665,582
	Pismo clam.....	15,812	735,432
	Yellowtail.....	13,198	144,876
	Grouper.....	6,248	33,232
	All other.....	3,682	61,513
	Totals.....	\$35,339,084	372,181,801
San Pedro.....	White seabass.....	\$144,137	603,589
	California barracuda.....	102,498	565,353
	Spiny lobster.....	86,978	163,584
	Pacific mackerel.....	64,565	2,856,865
	Bluefin tuna.....	61,867	473,713
	Anchovy.....	55,656	4,452,480
	Yellowfin tuna.....	52,767	390,292
	Sardine.....	51,358	2,014,021
	Black sea bass.....	45,937	299,266
	Jack mackerel.....	42,857	2,012,057
	Rockfish.....	37,232	370,337
	Grouper.....	33,320	177,232
	California halibut.....	30,402	118,479
	Swordfish.....	24,785	61,684
	Albacore.....	24,036	136,179
	White croaker (kingfish).....	15,878	447,311
	Sculpin.....	14,632	59,845
	Squid.....	14,630	677,298
	Yellowtail.....	11,532	126,582
	California pompano.....	10,547	43,782
	Shark.....	10,071	93,569
	Cabrilla.....	9,395	63,438
	All other.....	18,119	160,581
	Totals.....	\$963,199	16,367,537
Newport Beach.....	Pacific mackerel.....	\$166,973	7,388,164
	Abalone.....	98,838	1,173,863
	Jack mackerel.....	75,646	3,551,440
	Swordfish.....	60,070	149,503
	Spiny lobster.....	48,432	91,089
	Albacore.....	22,616	128,135
	Sardine.....	13,511	529,835
	White seabass.....	11,117	46,553
	Anchovy.....	5,935	474,810
	All other.....	7,148	41,118
	Totals.....	\$510,286	13,574,510
Long Beach.....	Anchovy.....	\$244,778	19,582,260
	Sardine.....	76,559	3,002,302
	Jack mackerel.....	43,875	2,059,840
	Spiny lobster.....	27,944	52,556
	Rockfish.....	17,927	152,874
	Pacific mackerel.....	12,566	556,030
	All other.....	6,504	56,544
	Totals.....	\$430,153	25,462,406
Wilmington.....	Jack mackerel.....	\$99,931	4,691,583
	Anchovy.....	89,027	7,122,145
	Pacific mackerel.....	79,591	3,521,725
	White croaker (kingfish).....	5,559	152,300
	All other.....	969	37,992
	Totals.....	\$275,077	15,525,745

TABLE 48—Continued

Landings of the Commercial Fishing Boats and Shipments Into the Los Angeles Region During 1956,
Shown by Port of Landing With the Corresponding Values

		Value	Pounds
Los Angeles.....	Salmon.....	\$61,804	116,656
	Sablefish.....	56,884	309,972
	Sturgeon.....	14,734	23,601
	Pismo clam.....	9,783	455,040
	All other.....	44,918	170,857
	Totals.....	\$188,123	1,076,126
Santa Monica.....	Anchovy.....	\$33,375	2,669,995
	Sardine.....	10,151	398,089
	Spiny lobster.....	9,880	18,581
	All other.....	13,636	303,979
	Totals.....	\$67,042	3,390,644
Redondo Beach.....	Spiny lobster.....	\$5,908	11,111
	All other.....	4,532	62,096
	Totals.....	\$10,440	73,207
All other ports.....	Spiny lobster.....	\$5,457	10,263
	All other.....	3,618	27,957
	Totals.....	\$9,075	38,220

TABLE 49

Landings of the Commercial Fishing Boats and Shipments Into the San Diego Region During 1956,
Shown by Port of Landing With the Corresponding Values

		Value	Pounds
San Diego region totals.....		\$19,082,960	144,645,675
San Diego.....	Yellowfin tuna.....	\$8,648,882	63,965,600
	Skipjack.....	7,024,702	60,803,098
	Albacore.....	2,916,242	16,732,918
	Bluefin tuna.....	121,546	925,714
	White seabass.....	84,110	372,320
	Spiny lobster.....	56,454	105,719
	California halibut.....	32,753	148,204
	California barracuda.....	30,986	183,132
	Abalone.....	25,942	351,149
	Swordfish.....	20,733	49,910
	Shark.....	17,501	178,829
	Jackknife clam.....	9,689	26,683
	Sculpin.....	7,305	36,251
	Yellowtail.....	7,139	97,927
	Rockfish.....	6,023	71,314
	All other.....	18,453	446,270
	Totals.....	\$19,028,460	144,495,038
La Jolla.....	Spiny lobster.....	\$18,293	34,257
	Totals.....	\$18,293	34,257
Oceanside.....	Spiny lobster.....	\$8,039	15,054
	All other.....	5,678	38,318
	Totals.....	\$13,717	53,372
Cardiff.....	Spiny lobster.....	\$11,622	21,764
	White seabass.....	50	220
	Totals.....	\$11,672	21,984
All other ports.....	Spiny lobster.....	\$7,255	13,586
	All other.....	3,563	27,438
	Totals.....	\$10,818	41,024

TABLE 50
The Recorded Statewide Catch, in Numbers of Fish, Made by Anglers Fishing From Licensed Party Boats¹ and the Number of Angler Days

Species	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
Albacore-----	11,445	15,414	22,692	118,087	75,924	187,267	23,363	20,098	78,688	65,814
Barracuda, California-----	677,449	384,056	366,423	256,367	269,545	336,862	170,550	282,552	154,962	87,603
Halibut, California-----	104,436	143,462	104,639	85,935	56,265	34,158	34,292	59,674	35,802	21,661
Rock bass ² -----	682,789	630,223	796,959	619,397	781,609	535,832	711,395	876,667	497,343	470,362
Rockfish-----	193,652	410,665	570,637	679,164	721,808	706,004	696,480	1,149,367	1,737,707	2,036,708
Salmon-----	5,018	11,209	23,057	56,337	71,970	86,472	98,723	119,911	128,978	114,505
Seabass, white-----	20,724	24,078	65,545	54,718	44,367	41,043	28,182	41,588	30,103	19,755
Yellowtail-----	6,948	13,028	17,710	6,971	23,721	59,263	27,702	40,872	36,468	29,198
All other-----	367,971	477,884	372,132	313,437	302,405	318,974	486,471	683,808	413,832	417,389
Total number of fish-----	2,070,432	2,110,019	2,339,794	2,190,413	2,350,644	2,305,875	2,280,158	3,274,537	3,113,883	3,262,995
Number of angler days-----	359,436	407,757	469,915	544,264	556,949	562,898	502,146	532,190	496,286	523,063

¹ Does not include barges.

² Rock bass includes two species, kelp bass (*Paralabrax clathratus*) and sand bass (*P. nebulifer*).

TABLE 51

**The Recorded Catch of Live Bait in Southern California Made by the Vessels
Supplying the Party Boat Fleet**

(Pounds)

Species	1952	1953	1954	1955	1956
Anchovy	13,620,879	12,783,016	13,372,042	12,250,890	12,663,614
Croaker, white (kingfish)	189,171	47,992	56,650	33,155	34,050
Mackerel, jack	33,126	1,414	405		
Queenfish	233,545	94,411	67,258	57,571	6,600
Sardine	227,571	19,865	137,563	80,955	15,770
Sardine, "firecrackers"	25,649	11,345	2,880	37,259	270
Smelt	28,299	19,704	26,187	21,983	7,650
Other species	6,464		8,786	3,767	225
Total pounds	14,364,704	12,977,747	13,671,771	12,485,580	12,728,179
Number of boats reporting	24	30	23	22	18

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